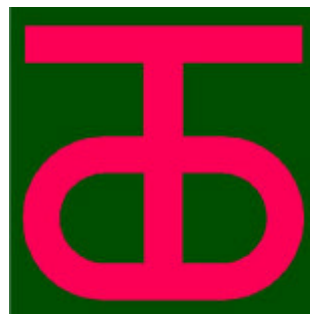


**U.S. ARMY RESERVE
90th REGIONAL SUPPORT COMMAND**

Gene Stout and
Associates
Loveland, CO

INTEGRATED NATURAL RESOURCES MANAGEMENT PLAN AND ENVIRONMENTAL ASSESSMENT

2003-2007



**Environmental Division
90th Regional Support Command**

INTEGRATED NATURAL RESOURCES MANAGEMENT PLAN AND ENVIRONMENTAL ASSESSMENT

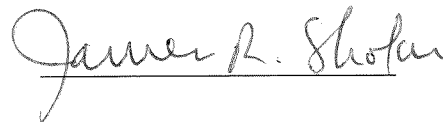
90th Regional Support Command Installation Management Agency (Army Reserve)

ENDORSEMENT

This Integrated Natural Resources Management Plan meets requirements of the Sikes Act (16 USC 670a *et seq.*) as amended.

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INTEGRATED NATURAL RESOURCES MANAGEMENT PLAN AND ENVIRONMENTAL ASSESSMENT

90th Regional Support Command Installation Management Agency (Army Reserve) and U.S. Army Reserve Command

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PREFACE

Integrated management plans for natural and cultural resources provide resource managers with the "how to" and the justification to carry out Department of Defense's conservation goals. Integrated Natural Resource Management Plans support the military mission by providing for sustained use of its land, sea, and air space; protecting valuable natural and cultural resources for future generations; meeting all legal requirements; and promoting compatible multiple uses of those resources.

Ms. Sherri Goodman

Former Deputy Under Secretary of Defense (Environmental Security)

The primary use of Weekend Training and Annual Training sites is to allow for more realistic training of enlisted and officer personnel in military operations. The conservation of training and range areas and the protection of environmental quality at Weekend Training and Annual Training sites are command obligations.

(Department of the Army 1997a)

This Integrated Natural Resources Management Plan is the 90th Regional Support Command's plan of action for the conservation of natural resources entrusted to the U.S. Army Reserve. The plan is for five years, but the philosophy behind it is for a much longer period. The 90th Regional Support Command will conserve its biological diversity and make sound decisions regarding the use of natural resources to support both the military mission and needs of the region and the nation.

The 90th Regional Support Command lands are used to serve this nation's defense today as they have been for decades. As we enter the 21st Century, this legacy is not taken lightly by those who use these training lands. This Integrated Natural Resources Management Plan is dedicated to the next generation of soldiers and other Americans who will use these lands and their natural resources.

INTEGRATED NATURAL RESOURCES MANAGEMENT PLAN AND ENVIRONMENTAL ASSESSMENT

90th Regional Support Command Installation Management Agency (Army Reserve) and U.S. Army Reserve Command

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EXECUTIVE REPORT

As we enter the dawn of a new century, the men and women who wear America's uniform stand proud to serve an important role in the continuing efforts to keep our skies clear, our oceans blue, and our precious soils clean. There is no greater gift we can give our children.

General John M. Shalikashvili, U.S. Army
Former Chairman, Joint Chiefs of Staff

Purpose

The U. S. Army needs land to train troops and to build, test, and store materials. With land comes the responsibility of stewardship. The Army's conservation objectives are to:

- ensure land remains available for missions,
- maintain land in the best natural condition for realistic training and the conservation of natural ecosystems, and
- minimize land-related restrictions on training through good stewardship.

This Integrated Natural Resources Management Plan (INRMP) guides implementation of the natural resources program from 2003 through 2007 at 90th Regional Support Command (RSC) lands throughout Arkansas, Louisiana, New Mexico, Oklahoma, and Texas. The program conserves 90th RSC lands and their natural resources and helps ensure compliance with environmental laws and regulations. The INRMP helps ensure the maintenance of quality training lands to accomplish the 90th RSC's critical military mission on a sustained basis and to ensure that natural resources conservation measures and U.S. Army Reserve military activities are integrated and consistent with federal stewardship requirements.

Environmental Compliance

General

Preparation and implementation of this INRMP are required by the Sikes Act (16 USC 670 *et seq.*), Department of Defense Instruction 4715.3 (*Environmental Conservation Program*) (Department of Defense 1996), Army Regulation (AR) 200-3 (*Natural Resources – Land, Forest, and Wildlife Management*) (Department of the Army 1995a), and Army Memorandum (21 March 1997), *Army Goals and Implementing Guidance for Natural Resources Planning Level Survey (PLS) and Integrated Natural Resources Management Plans (INRMP)* (Department of the Army 1997a). This INRMP was prepared using *Guidelines to Prepare Integrated Natural Resources Management Plans for Army Installations and Activities* (U.S. Army Environmental Center 1997).

This INRMP helps the 90th RSC comply with other federal and state laws, most notably laws associated with environmental documentation, wetlands, endangered species, water quality, and wildlife management in general. This plan describes how the 90th RSC will implement provisions of AR 200-3 and environmental policies in accordance with the 90th RSC Pamphlet 420-1, *Facilities Management*.

National Environmental Policy Act

The National Environmental Policy Act (NEPA) requires disclosure of environmental impacts created by proposed major federal actions. AR 200-2 (*Environmental Analysis of Army Actions*) (Department of the Army 2002) and the Council on Environmental Quality (*Implementing Guidelines for NEPA*, 40 CFR Parts 1500-1508) recommend an environmental assessment be completed for natural resources

management plans. AR 200-2 outlines NEPA compliance requirements of proposed Army actions. Recognizing the efficiencies and benefits associated by combining the INRMP and its associated environmental assessment into one document, this plan has been developed to satisfy both requirements. The INRMP has been reorganized from the Army Guidelines (U.S. Army Environmental Center 1997) to accommodate NEPA documentation within the plan.

Sikes Act Improvement Act

The Sikes Act, as amended according to the Sikes Act Improvement Act of 1997, states,

The Secretary of Defense shall carry out a program to provide for the conservation and rehabilitation of natural resources on military installations. To facilitate the program, the Secretary of each military department shall prepare and implement an integrated natural resources management plan for each military installation under the jurisdiction of the Secretary. Consistent with the use of military installations to ensure the preparedness of the Armed Forces, the Secretaries of the military departments shall carry out the program to provide for the conservation and rehabilitation of natural resources on military installations; the sustainable multipurpose use of the resources, which shall include hunting, fishing, trapping, and nonconsumptive uses; and subject to safety requirements and military security, public access to military installations to facilitate the use.

The Sikes Act [16 USC 670 a (b)(1)] requires that INRMPs include:

- fish and wildlife management, land management, forest management, and wildlife-oriented recreation;
- fish and wildlife habitat enhancement or modifications;
- wetland protection, enhancement, and restoration where necessary for support of fish, wildlife, or plants;
- integration of, and consistency among, the various activities conducted under the INRMP;
- establishment of specific natural resources management goals and objectives and time frames for proposed actions;
- sustainable use by the public of natural resources to the extent that the use is not inconsistent with the needs of fish and wildlife resources;
- public access to the military installation (*i.e.*, facility in the case of the 90th RSC) that is necessary or appropriate for sustainable use by the public of natural resources to the extent that the use is not inconsistent with the needs of fish and wildlife resources, subject to requirements necessary to ensure safety and military security;
- enforcement of applicable natural resource laws;
- no net loss in the capability of military installation (*i.e.*, facility) lands to support the military mission of the installation;
- regular review of this INRMP and its effects, not less often than every five years;
- provisions for spending hunting and fishing permit fees exclusively for the protection, conservation, and management of fish and wildlife, including habitat improvement, and related activities in accordance with the INRMP;
- exemption from procurement of services under Office of Management and Budget Circular A-76 and any of its successor circulars; and

- priority for contracts involving implementation of this INRMP to state and federal agencies having responsibility for conservation of fish and wildlife.

Endangered Species Act

This INRMP has the signatory approval of the U.S. Fish and Wildlife Service (USFWS). This signature approval includes agreement that the INRMP complies with the Endangered Species Act. Review of the INRMP is informal consultation with regard to the Endangered Species Act.

Within the spirit and intent of the Sikes Act Amendments of 1997 and the Endangered Species Act, this INRMP serves to provide *adequate management or protection*, a term that originated in the definition of occupied habitat from Section 3 of the Endangered Species Act. If *adequate management or protection* is already in place, then additional special management (*i.e.*, critical habitat designation) is not required when lands are found to contain physical and biological features essential to the conservation of the species. *Adequate management or protection* is provided by a legally operative plan that addresses the maintenance and improvement of primary constituent elements important to the species and manages for the long-term conservation of the species. This reasoning leads to the conclusion made by the USFWS that, where applicable, federal critical habitat designation is not warranted if the INRMP includes certain criteria, which are summarized in Section 1.9.2, *Federal- and State-listed Species Management*.

Scope

The plan provides the basis and criteria for protecting and enhancing natural resources using soil conservation and watershed, landscape, and ecosystem perspectives, consistent with the military mission. Provisions of the INRMP apply to each directorate, command, and tenant unit of the 90th RSC; other federal, state, or local agencies; contractors; and individuals who either directly or indirectly use 90th RSC natural resources as well as units and outlying detachments of personnel assigned or attached to the 90th RSC.

The Sikes Act Improvement Act and Department of Defense policy define military installations that require INRMPs in terms of their natural resources. The U.S. Army Reserve Center (USARC) at Seagoville, Texas (Facility TX 068), which includes a Local Training Area, is the only facility within the 90th RSC that includes significant natural resources and meets this definition.

This INRMP describes specific projects for Seagoville USARC (Chapter 2). However, the INRMP includes general policies and projects for natural resources on other 90th RSC lands (chapters 1 and 3), when appropriate.

This INRMP does not generally include the Barker Dam Local Training Area, Texas, which has significant natural resources, as determined by Department of Defense policy. Barker Dam Local Training Area is administered and managed by the U.S. Army Corps of Engineers and is used by the 90th RSC via a permit. This INRMP also does not generally include land leased for training at MG Harry Twaddle Armed Forces Reserve Center, Midwest City, Oklahoma, which has significant natural resources, as determined by Department of Defense policy. However, Section 2.2.3, *Integrated Training Area Management* includes a project to repair military-related damage to these lands.

This INRMP is an integral part of the 90th RSC Master Plan and the Army Reserve Environmental Management System.

Relationship to the Military Mission

This INRMP supports the military mission by protecting and enhancing Army lands upon which the mission is dependent. The INRMP describes impacts of the military mission upon natural resources and means to mitigate these impacts. However, this INRMP does not evaluate the 90th RSC military mission, nor does it replace any requirement for environmental documentation of that military mission.

Partnerships

This document was prepared in partnership and cooperation with the U.S. Fish and Wildlife Service and Texas Parks and Wildlife Department, representing the federal and state Sikes Act cooperating agencies. Other partners in the implementation of this INRMP are the Installation Management Agency (Army Reserve), Army Environmental Center, and the U.S. Army Corps of Engineers.

INRMP Implementation Summary

This INRMP is designed to provide direct input into the Environmental Program Requirements (EPR) budget process. The INRMP describes specific projects for each training area with justifications, timelines, and budgets. Each project with its goals and objectives and timelines are listed in Appendix 3.3. Section 3.4 lists each project by funding source and provides project-specific EPR numbers and funding classes (if an environmental project) and estimated costs to implement during fiscal years 2003-2007.

The below table summarizes INRMP implementation costs by funding source.

INRMP Implementation Costs*

Type Funds Anticipated	Section	FY 03	FY 04	FY 05	FY 06	FY 07	Totals
Environmental	3.4.2	\$115	\$47	\$53	\$53	\$79	\$347
ITAM	3.4.4	\$5	\$5	\$5	\$10	\$10	\$35
Totals		\$120	\$52	\$58	\$63	\$89	\$382

* Funding in thousand of dollars

Costs and Benefits

- **Costs:** This INRMP will cost about \$382,000 for FY 03 - FY 07 to implement. Funding will be primarily via environmental funds; however, Integrated Training Area Management funding may also be used if this program is developed.
- **Military Mission Benefits:** Implementation of this INRMP will improve the quality of training land. It will enhance mission realism through the perpetuation of more realistic training lands. It will reduce maintenance costs, improve health and safety, and enhance the capability for long range planning.
- **Environmental Benefits:** The INRMP provides the basis for the conservation and protection of natural resources. It will help reduce vegetation loss and soil erosion due to military activities, reduce the potential for environmental pollution, and promote biodiversity conservation. Plan implementation will increase overall knowledge of the operation of ecosystems on 90th RSC lands through surveys. INRMP implementation will decrease long-term environmental costs and reduce 90th RSC liabilities from environmental noncompliance.
- **Other Benefits:** Troop environmental awareness will be enhanced while training on 90th RSC lands. Community relations and the 90th RSC's environmental image, internal and external to the

Department of Defense, will be enhanced.

INRMP Organization

This INRMP is organized in distinct categories.

- Chapter 1, *Integrated Overview*, describes general relationships between natural resources management and the overall 90th RSC mission. It lists compliance requirements, describes the natural resources management philosophy as a whole, and provides a summary of the NEPA process and alternatives used to develop the environmental assessment portion of this INRMP. It identifies responsible parties and their roles in implementation of this INRMP. This chapter also describes projects common to all 90th RSC lands.
- Chapter 2, *Seagoville U.S. Army Reserve Center*, describes the affected environment (physical, biological, and human) at Seagoville USARC, including a description of the military mission. The chapter describes natural resources projects specific to Seagoville USARC.
- Chapter 3, *Implementation*, provides means used for implementing this INRMP for all training areas, including organization, personnel, project summary, funding, and command support.
- Chapter 4, *Environmental Consequences*, describes overall environmental consequences of implementing this INRMP.
- Chapter 5, *Conclusions*, provides the conclusion of the NEPA analysis within the INRMP.
- **References** documents all sources referenced in this INRMP.
- **Agencies and Persons Consulted** identifies local, state, and federal agencies and individuals consulted by the preparers of this INRMP for their expertise.
- **Plan Preparers** identifies individuals, with their qualifications, who prepared this document.
- The **Distribution List** identifies all agencies, organizations, and individuals to whom copies of this INRMP were sent.
- The **Acronyms** section lists all acronyms used and their meaning.
- **Appendices** contain information or data relevant to natural resources management 90th RSC lands.

For those who are primarily interested in natural resources projects planned for 2003-2007, they are described in chapters 1, 2, and 3, summarized for budget purposes in Section 3.4, and summarized by project with abbreviated goals and objectives in Appendix 3.3.

Monitoring INRMP Implementation

The INRMP will be evaluated through monitoring programs, including the Environmental Compliance Assessment System, the Environmental Quality Report, and reviews by the Installation Management Agency (Army Reserve) and other interested parties. The list of INRMP goals and objectives in Appendix 3.3 can provide a basis for evaluating plan implementation.

NEPA Findings and Conclusions

Findings based on the incorporated environmental assessment indicate that, under the Preferred Alternative (implementation of this INRMP), potential consequences would be either no significant adverse effects or beneficial effects on each resource area. The affected environment would not be significantly negatively affected by proceeding with the Preferred Alternative. No significant cumulative

effects would be expected. Therefore, the preparation of an Environmental Impact Statement is not required, and the preparation and publication of a Finding of No Significant Impact is appropriate.

Summary

The INRMP outlines the steps required to meet Department of Defense, Installation Management Agency (Army Reserve), and the 90th RSC's legal and moral obligations to provide for the stewardship of natural resources on 90th RSC facilities and other lands, while enabling the accomplishment of the military mission. The INRMP has been generated through cooperation with the appropriate regulatory agencies. As a public document, it will support and perpetuate the military mission while fostering stewardship and goodwill for the 90th RSC, the Installation Management Agency (Army Reserve), and the Department of Army throughout areas influenced by operations of the 90th RSC.

1.0 INTEGRATED OVERVIEW

Army natural resources are the essential elements of ecosystems that provide realistic, sustainable assets for military missions. These same ecosystems contribute toward regional biodiversity and provide habitat for endangered, threatened, proposed, sensitive, and native plants and animals. The Army is required by law to manage natural resources. The Sikes Act direction is to “provide for the conservation and rehabilitation of natural resources on military installations.”¹

Army Environmental Vision Statement

The Army will be a national leader in environmental and natural resource stewardship for present and future generations as an integral part of our mission².

The Army commitment to natural resources management is reflected in the U.S. Army Environmental Strategy into the 21st Century, which focuses on responsibly managing Army lands to ensure long-term natural resource productivity so the Army can achieve its mission. This Army commitment to natural resources management is further emphasized in Army Regulation 200-3 (*Natural Resources - Land, Forest, and Wildlife Management*) (Department of the Army 1995a), and Headquarters, Department of Army INRMP Policy Memorandum, 21 March 1997 (*Army Goals and Implementing Guidance for Natural Resources Planning Level Surveys (PLS) and Integrated Natural Resources Management Plans (INRMP)*) (Department of the Army 1997a), which require that INRMPs be developed and maintained for all Army installations (*i.e.*, facilities) with significant natural resources, as well as establish policy, procedures, and responsibilities for Army lands and their natural resources.

The command and staff of the 90th RSC are committed to environmental stewardship as an integral part of its mission. This commitment is evidenced by support of past environmental programs and their full support of this INRMP. This INRMP has projects specific to Seagoville USARC (Chapter 2) since this is the only facility within the 90th RSC that meets Sikes Act and Department of Defense requirements for a specific INRMP. This INRMP (chapters 1 and 3) also has more general projects that are pertinent to all facilities and lands within the 90th RSC.

This INRMP does not include the Barker Dam Local Training Area, Texas, which also has significant natural resources. Barker Dam Local Training Area is administered and managed by the U.S. Army Corps of Engineers and is used by the 90th RSC via a permit.

It is important to understand the relationship between the natural resources program and the 90th RSC as a whole. A comparison of the 90th RSC mission and vision with the mission, goals, and objectives of the natural resources program helps delineate this relationship.

¹ Ray Clark, former Principal Deputy Assistant Secretary of the Army (Installations and Environment), 2000 Memorandum: Army Forest Resources Conservation.

² Army Environmental Policy Institute. 1992. *U.S. Army Environmental Strategy into the 21st Century*. U.S. Government Printing Office 1993-747-677, 38 p.

1.1 90th RSC Mission, Vision, and Goals

90th RSC Mission

- Command and control all units in Arkansas, Louisiana, Oklahoma, New Mexico, and Texas not functionally assigned to a go-to-war/functional command, or to a reserve division or a special operations force.
- Provide full service support to all USAR units, including special operations forces, within the five state area. This support includes all areas of resource management, logistics management, personnel and personnel support related functions, and real property management.
- Provide command supervision over Installation Management Agency (Army Reserve) ground maintenance support activities and equipment concentration sites with the five state region.

90th RSC Vision

The Regional Support Command will provide the best possible support to all soldiers throughout the five state region to ensure their total readiness to mobilize, deploy and perform their mission as an integral part of America's Army, and to be responsive to the nation's needs.

90th RSC Goals

- Total commitment by all members of the Headquarters to quality service.
- Utilize resources effectively.
- Provide improved support to all units in the geographic area.
- Maintain quality facilities.
- Improve individual and unit readiness.
- Manage our future through a cohesive, comprehensive and flexible planning process.
- Develop integrated programs in all functional areas which meet the present and future needs of the five state region.
- Maintain the quality of life for all our soldiers and civilians.
- Attain and/or maintain all force support package units' personnel, training and equipment status at or above the readiness levels directed by USARC.

1.2 Natural Resources Mission, General Goals, and General Objectives

Natural Resources Mission

Provide professional management and stewardship of natural resources on 90th Regional Support Command lands while providing opportunities for multiple compatible uses of natural resources, complying with environmental laws, and supporting the military mission.

Below are general 90th RSC natural resources goals and objectives used to attain them. These objectives, and those more specific in chapters 2 and 3, serve as a checklist to monitor the success of the plan. Some objectives fit more than one category. When this occurs, the most-fitting category was chosen.

Goal 1. Provide quality natural resources as a critical training asset upon which to accomplish the military mission of the 90th RSC.

Objective. Ensure no net loss in the capability of 90th RSC lands to support existing and projected military training and operations.

Goal 2. Manage natural resources to assure good stewardship of public lands entrusted to the care of the Army.

Objective 1. Use adaptive ecosystem management strategies to protect, conserve, and enhance native fauna and flora with an emphasis on priority species and native biodiversity enhancement.

Objective 2. Monitor and manage soils, water, vegetation, and wildlife on 90th RSC lands with a consideration for all biological communities and human values associated with these resources.

Objective 3. Ensure the 90th RSC natural resources program is coordinated with other federal and state agencies and conservation organizations with similar interests.

Goal 3. Comply with laws and regulations that pertain to management of 90th RSC natural resources.

Objective 1. Manage natural resources within the spirit and letter of environmental laws, particularly the Sikes Act upon which this INRMP is predicated.

Objective 2. Protect, restore, and manage sensitive species, habitats and wetlands.

Objective 3. Use procedures within NEPA to make informed decisions that include natural resources considerations and mitigation.

Objective 4. Ensure the 90th RSC natural resources program is consistent with the protection of cultural and historic resources.

Objective 5. Implement this INRMP within the framework of Department of Defense and Army policies and regulations.

1.3 Support of Regional Support Command Goals

Implementation of this INRMP will support the mission and vision of the 90th RSC. The natural resources team of the 90th RSC is committed to supporting the military mission, providing stewardship of resources entrusted to the Installation Management Agency (Army Reserve), and being a valued member of the 90th RSC team. Implementation of this INRMP will demonstrate those qualities.

1.4 Relationships Between Natural Resources and the Military Mission

The conservation of natural resources and the military mission will not be mutually exclusive.³

³ AR 200-3, *Natural Resources - Land, Forest and Wildlife Management*, para 2-11.

Army training requires the realistic placement of personnel and equipment similar to real combat situations. Thus, the environment at 90th RSC training lands must be maintained in as natural condition as possible. Some 90th RSC lands, particularly at Seagoville USARC, provide suitable environments for small unit operations. Consequently, efforts are made to maintain and improve this type of area.

1.4.1 General Compatibility Issues

It is important to identify potential conflicts and incompatibility between the conservation efforts of natural resources and their uses and the military mission. Potential conflicts may be spatial, temporal, or residual/indirect in nature. Spatial conflicts may occur when areas contain natural resources that limit military use (e.g. wetlands) or when more than one natural resource occurs within an area resulting in different management objectives. Temporal conflicts may occur when two parties intend to use an area at the same time or when planned uses are not optimized with respect to biological issues (e.g., activity periods of protected species). Residual/indirect conflicts may occur when incidental noise or wildfire, for example, have an effect on natural resources or their planned use.

Because military training is the principal use of 90th RSC training lands, natural resources projects are planned to minimize these conflicts. Occasionally, conflicting military goals and conservation mandates may preclude specific military activities. This INRMP and other management plans address these conflicts. This INRMP includes projects that have been developed to avoid and minimize potential and existing conflicts.

1.4.2 Effects of the Military Mission on Natural Resources

The Unit Leader's Handbook for Environmental Stewardship (Department of Army 1994) lists six primary consequences of intensive and continuous use of Army training lands:

- the loss of historical sites, vegetation, water resources, and wildlife;
- diminished quality of available realistic training areas;
- diminished operational security;
- ineffective tactical operations;
- the creation of safety hazards to personnel and equipment, and
- an increase in training, maintenance costs, and litigation.

These impacts have been relatively minimal on 90th RSC training lands. However, removal of plants and soil compaction from concentrated or repeated exercises has occurred but has been primarily in specific locations (e.g., Seagoville field hospital site and rifle range) where such training takes place. In general, military activities are small scale and have little effect on 90th RSC natural resources. Consequently, the 90th RSC mission has preserved the natural resources upon which it is based.

1.4.3 Effects of Natural Resources or Their Management on the Military Mission

The 90th RSC is determined to complete its training mission successfully, and an integral part of that mission is good environmental stewardship. The principles followed on 90th RSC lands are adaptive management of soil, vegetation, water, and wildlife resources and proper military mission planning and scheduling. Management of natural resources on 90th RSC training lands supports the military mission by maintaining vegetation and other resources that support realistic military mission operations. The

management of natural resources does not adversely affect the military mission. Overall, 90th RSC training lands demonstrate that the mission and natural resources management are not mutually exclusive.

1.4.4 Future Military Mission Impacts on Natural Resources

If basic mission, land area, and intensity of missions remain unchanged at the 90th RSC, mission impacts on natural resources will remain similar to those today. Relatively small changes in unit missions or equipment, however, could have more serious impacts on training lands, mainly due to their small size.

The Army is being forced to make do with less in terms of both quantity and quality of training lands. Effective training resources must be managed so as to not exceed the optimum training carrying capacity of sites to ensure sustained use of the resource. It is difficult to predict how much more traffic or usage 90th RSC training lands could sustain without causing environmental degradation and the corresponding degradation of the land for military usage.

There are numerous positive effects of the military mission on 90th RSC training lands' natural resources. The most general and most significant is the 90th RSC's commitment to natural resources management, including the minimizing and mitigation of military mission damage. This natural resources commitment is beneficial for the natural resources in general and the public perception of the military as real stewards of the land. Also, the mere presence of these training lands, such as at Seagoville USARC, continues to preserve native ecosystems by minimizing urban development, optimizing and managing for biodiversity, preserving open areas and riparian habitats, and ensuring that land uses are conducted in a manner that protects the environment.

1.5 Compliance Requirements

The INRMP is the primary mechanism for compliance with natural resources laws and regulations. Federal, state, and local laws and regulations may apply to proposed management actions in this plan.

1.5.1 Sikes Act

The Sikes Act (as amended) requires an integrated natural resources management plan be prepared and implemented for each military installation (*i.e.*, facility), unless the absence of significant natural resources makes preparation of a plan inappropriate. The Sikes Act requires that INRMPs include:

- fish and wildlife management, land management, forest management, and wildlife-oriented recreation;
- fish and wildlife habitat enhancement or modifications;
- wetland protection, enhancement, and restoration where necessary for support of fish, wildlife, or plants;
- integration of, and consistency among, the various activities conducted under the INRMP;
- establishment of specific natural resources management goals and objectives and time frames for proposed actions;
- sustainable use by the public of natural resources to the extent that the use is not inconsistent with the needs of fish and wildlife resources;
- public access to the military installation (*i.e.*, facility) that is necessary or appropriate for sustainable use by the public of natural resources to the extent that the use is not inconsistent with the needs of fish and wildlife resources, subject to requirements necessary to ensure safety and military security;

- enforcement of applicable natural resource laws;
- no net loss in the capability of military installation (*i.e.*, facility) lands to support the military mission of the installation (*i.e.*, facility);
- regular review of this INRMP and its effects, not less often than every five years;
- provisions for spending hunting and fishing permit fees exclusively for the protection, conservation, and management of fish and wildlife, including habitat improvement, and related activities in accordance with the INRMP;
- exemption from procurement of services under Office of Management and Budget Circular A-76 and any of its successor circulars; and
- priority for contracts involving implementation of this INRMP to state and federal agencies having responsibility for conservation of fish and wildlife.

1.5.2 National Environmental Policy Act

NEPA requires disclosure of environmental impacts created by proposed major federal actions. The intent of NEPA is to better inform decision-makers of potential impacts from proposed projects and to utilize this information early in the project planning process. AR 200-2 (*Environmental Analysis of Army Actions*) (Department of the Army 2002) and the Council on Environmental Quality *Implementing Guidelines for NEPA* (40 CFR Parts 1500-1508) recommend an environmental assessment be completed for natural resources management plans.

1.5.3 Endangered Species Act

This INRMP has the signatory approval of the U.S. Fish and Wildlife Service (USFWS). This signature approval includes agreement that the INRMP complies with the Endangered Species Act. Review of the INRMP is informal consultation with regard to the Endangered Species Act.

1.5.4 Department of Defense Instruction

Department of Defense Instruction 4715.3, *Environmental Conservation Program*, requires that INRMPs shall be prepared, maintained, and implemented for all lands and waters under Department of Defense control that have suitable habitat for conserving and managing natural ecosystems. Each plan shall contain information needed to make appropriate decisions about natural resources management and shall incorporate the principles of ecosystem management.

1.5.5 Army Regulations

AR 200-2 (*Environmental Analysis of Army Actions*) (Department of the Army 2002) provides policies, procedures, and responsibilities for integrating environmental considerations into Army planning and decision-making. It outlines NEPA compliance requirements of proposed Army actions. This regulation requires an environmental assessment be completed for natural resources management plans.

AR 200-3 (*Natural Resources-Land, Forest, and Wildlife Management*) (Department of the Army 1995a) provides policy, procedures, and responsibilities for the conservation, management, and restoration of land and its natural resources consistent with the military mission and national policies. It requires the preparation, implementation, and monitoring of an INRMP for each installation (*i.e.*, facility). This regulation also requires an annual internal review of INRMPs by the Army.

AR 200-4 (*Cultural Resources Management*) (Department of the Army 1997b) provides guidelines for integrating cultural resources issues into an INRMP. Guidelines focus on cultural resources compliance requirements that are generated as a result of ecosystem management activities, contributions that cultural

resources studies can make to ecosystem management decisions, and human activities, including those practiced by Native Americans, that should be supported and sustained in development and implementation of an ecosystem management plan.

AR 350-4 (*Integrated Training Area Management (ITAM)*) (Department of the Army 1998) defines the ITAM program's objectives as achieving optimal sustained use of lands for training and testing, integrating Army training and other mission requirements for land use with sound natural resources management, and advocating proactive conservation and land management priorities. It provides guidance for the integration of military mission requirements into INRMPs. The 90th RSC has no ITAM program, but this INRMP includes plans to develop such a program.

1.5.6 List of Laws and Regulatory Instruments

Appendix 1.5.6 lists the most significant federal and state laws and regulations and other regulatory instruments that govern implementation of this INRMP.

1.6 Biodiversity Conservation and Ecosystem Management

*We do not own this land; we are caretakers of the land and the plant and animal species that inhabit it. The American people entrust the land to our care, and we shall fulfill their trust. We shall conserve and protect these resources for the future.*⁴

Biological diversity (biodiversity) refers to the variety and variability among living organisms and the environment in which they occur. Biodiversity has meaning at various levels including ecosystem diversity, species diversity, and genetic diversity. The Department of Defense has developed A *Department of Defense (DoD) Biodiversity Management Strategy* (The Keystone Center 1996). This Strategy identifies five reasons to conserve biodiversity on military lands:

- (1) ***sustain natural landscapes*** required for the training and testing necessary to maintain military readiness;
- (2) ***provide the greatest return on the Defense investment*** to preserve and protect the environment;
- (3) ***expedite the compliance process*** and help avoid conflicts;
- (4) ***engender public support*** for the military mission; and
- (5) ***improve the quality of life*** for military personnel.

The Keystone Center report (1996) notes that the challenge is “*to manage for biodiversity in a way that supports the military mission*”. This strategy identifies the INRMP as the primary vehicle to implement biodiversity protection on military installations (*i.e.*, facilities). The model process developed within the strategy includes the following principles:

- support the military mission;
- use joint planning between natural resources managers and military operations personnel;
- integrate biodiversity conservation into INRMP and other planning protocols;
- involve internal and external stakeholders up front;
- emphasize the regional (ecosystem) context;

⁴ Robert M. Walker, former Assistant Secretary of the Army, Testimony before Congress, July 11, 1995.

- use adaptive management;
- involve scientists and use the best science available; and
- concentrate on results.

The Department of Defense (DoD Instruction 4715.3, *Environmental Conservation Program*) describes ecosystem management as, “a process that considers the environment as a complex system functioning as a whole, not a collection of parts, and recognizes that people and their social and economic needs are a part of the whole”. The Department of Defense goal with regard to ecosystem management is, “To ensure that military lands support present and future training and testing requirements while preserving, improving, and enhancing ecosystem integrity. Over the long term, that approach shall maintain and improve the sustainability and biological diversity of terrestrial and aquatic (including marine) ecosystems while supporting sustainable economies, human use, and the environment required for realistic military training operations.”

The 90th RSC will use ecosystem management to guide its program in the next five years and beyond. This management strategy enables the 90th RSC to conduct military training at its training lands while conserving natural resources upon which the quality of training ultimately depends. Adaptive management is an important component of ecosystem management. Adaptive management involves implementing the best option, testing that option’s results, and modifying implementation accordingly.

1.7 INRMP and NEPA Integration

This INRMP is an action-forcing document that triggers NEPA compliance requirements. AR 200-2 and AR 200-3 state that INRMPs will normally use environmental assessment procedures (Department of the Army 2002, 1995a).

AR 200-2 (*Environmental Analysis of Army Actions*) (Department of the Army 2002) requires the integration of the NEPA process early in project planning to ensure that planning and decision-making reflect environmental values, prevent delays, and minimize potential conflicts. The Council on Environmental Quality *Implementing Guidelines for NEPA* (40 CFR Parts 1500-1508) require environmental analyses and documentation under NEPA be integrated as much as practicable with other environmental reviews, laws, and executive orders. AR 200-2 specifically identifies the integration or concurrent development of natural resources management plans with appropriate NEPA analysis and documentation. Recognizing efficiencies and benefits associated by combining the INRMP and its associated Environmental Assessment (EA) into one document, this plan has been developed to satisfy both requirements.

To assist in identifying elements of the NEPA analysis, the following are specific locations within this INRMP where required EA sections (40 CFR Part 1508.9(b)) are embedded:

- Purpose of and Need for Action - Section 1.7.1
- Description of Alternatives including the Proposed Action - Section 1.7.4; Chapters 1-3
- Description of Affected Environment - Chapter 2
- Analysis of Environmental Consequences - Chapter 4
- Analysis of Cumulative Impacts - Section 4.3
- Agencies and Persons Consulted
- Distribution List

- Appendices

1.7.1 Purpose, Need, and Rationale

The 90th RSC proposes to implement its INRMP during 2003-2007. The purpose of the EA is to identify and evaluate environmental consequences of implementing the proposed plan, in accordance with the National Environmental Policy Act, the Council on Environmental Quality Regulations, and Army Regulation 200-2.

1.7.2 Scope

The Preferred Alternative is restricted to implementation of the INRMP. Environmental effects of implementing this plan on 90th RSC lands are the focus of environmental assessment aspects integrated into this plan.

1.7.3 Impact Analysis

The analysis process involved the review of facility natural resources-related data collected by the 90th RSC, other governmental agencies, universities, and contractors. The process involved interviews with 90th RSC personnel involved with natural resources management, military mission planning, and facility maintenance.

The objective of this analysis is to provide an evaluation of environmental consequences of an implementable INRMP that can guide the 90th RSC in the following activities:

- meeting training needs and military mission requirements,
- achieving natural resources management goals, and
- meeting legal and policy requirements, including those associated with NEPA, that are consistent with national natural resources management strategies.

1.7.4 Alternatives

NEPA requires the preparer of an EA to define and consider reasonable alternatives to the proposed action. Reasonable alternatives are those that are technically implementable. The Army reviewed possible management actions to determine the viability of implementing the actions while continuing to achieve its mission. The Army also considered federal and state laws and regulations governing natural resources management to incorporate their requirements into proposed management actions.

There are issues that will not be considered in alternative analyses sections as they take precedence over almost all management options. First and foremost, the 90th RSC military mission must not be compromised. Therefore, options that would inhibit the 90th RSC from performing its mission will not be considered. The exception would be the adoption of restrictions or alterations to standing operating procedures to comply with laws, such as the Endangered Species Act.

Second, issues of safety and security must not be compromised. Safety and security are high priorities to the 90th RSC and are directly related to maintaining the military mission. Therefore, management options that create significant safety and/or security risks will not be considered.

1.7.4.1 Preferred Alternative: INRMP Implementation (Proposed Management)

The Preferred Alternative (Proposed Action or Proposed Management) is to implement this INRMP for 2003-2007. The INRMP comprehensively manages natural resources while sustaining the Army's ability to successfully achieve its mission.

This INRMP presents information on the management of natural resources on 90th RSC lands, particularly those at Seagoville USARC. It also describes the setting and describes how lands will be managed to sustain ecological functions, protect federal-listed and other wildlife species, and provide sustained military use. Emphasis will be placed on proactive management to reduce the potential for negative environmental impacts due to the military mission.

The Preferred Alternative is viable. The Preferred Alternative **will** be described in chapters 1-3 within sections titled **Proposed Management**, and environmental consequences regarding implementation of the Preferred Alternative will be analyzed in Chapter 4.

1.7.4.2 No Action Alternative: Continue Existing Management

The No Action Alternative would be to continue management of natural resources on 90th RSC lands as is being done at present. Alternative 2 is not viable since the Sikes Act requires INRMPs and their implementation, particularly at Seagoville USARC. However, the No Action Alternative **will** be described in chapters 1-3 within sections titled **Current Management** to provide a baseline analysis, and environmental consequences regarding implementation of the No Action Alternative will be analyzed in Chapter 4.

1.7.4.3 Alternatives Considered but Eliminated

No Management. The No Management Alternative would be to not manage natural resources on 90th RSC lands. This alternative is similar to the manner in which military lands, in general, were managed prior to the passage of many environmental laws in the late 1960s through early 1970s and before the creation of professional natural resources management in the early 1980s. This is not a viable alternative. Laws and executive orders on endangered species, water quality, federal land management, etc., as well as Department of Defense and Army policies, preclude the implementation of the No Management Alternative. This alternative **will not** be further discussed.

Compliance Management

The Compliance Management Alternative would be to implement only those portions of the INRMP required to maintain compliance with laws. Compliance with laws, such as the Endangered Species Act and National Environmental Policy Act, would ensure implementation of some programs but would ignore other programs within the INRMP. It is a lower intensity natural resources program that is reactive to violations of laws or threats of lawsuits.

Passage of the Sikes Act in 1997 requires INRMPs to include programs such as wildlife management, land management, fish and wildlife habitat management, etc. The Sikes Act further requires implementation of programs identified within the INRMP. Therefore, each program within the INRMP is compliance driven unless it is specifically identified as optional (dependent upon additional funding, dependent upon future conditions, etc.). Thus, the Compliance Management Alternative is virtually identical to the Preferred Alternative, full implementation of the INRMP. The Compliance Management Alternative, as a separate alternative, **will not** be further discussed in analysis sections.

Other Management Options

Most natural resources programs have options other than ones selected for this INRMP. For example, there are different strategies with regard to vegetation management. As inherent with integrated programs, many of these interact with each other. For example, reducing or increasing levels of exotic species control can significantly affect ecosystem functionality (through such mechanisms as increased or decreased wildfire disturbance, changes in competition levels with native species, etc.).

Possible options create many potential combinations, each of which could be an alternative to the Proposed Action. Various laws, compliance documents, Army regulations, etc. prohibit the implementation of many of these possibilities. For example, training that creates a net loss in wetlands is not a viable option due to public law and Department of Defense policy. On the other hand, selecting management techniques for rehabilitating disturbed land is an option, and there are many choices. The same would be true of changing monitoring programs for vegetation condition trends or changing erosion control techniques.

Other management options were considered and dismissed from further consideration for various reasons (*e.g.*, ecological value, cost/benefit analyses, military mission compatibility) during development of the INRMP. Management programs and projects selected for the Proposed Action are based on knowledge and experience from professional management of 90th RSC natural resources and the best scientific knowledge, research, and opinions available. The Other Management Options Alternative ***will not*** be further discussed in analysis sections.

1.7.4.4 Alternatives Summary

Each management section in chapters 1-3 has two major subsections:

- **Current Management**, which is the No Action Alternative and describes ongoing activities or activities planned in the previous INRMP, and
- **Proposed Management**, which is the Preferred Alternative and describes planned activities in a project format.

Chapter 4, Environmental Consequences, analyzes environmental consequences of continuation of the Current Management and implementation of the Proposed Management.

1.7.5 Issues Not Addressed or Considered to be Potentially Significant

NEPA defines scoping as “*an early and open process for determining the scope of issues to be addressed and for identifying significant issues related to the proposed action*” (40 CFR 1501.7). These issues are used to develop alternative actions, including mitigation measures, and to evaluate the environmental consequences of those actions. Many personnel identified in *Agencies and Persons Contacted* and *Plan Preparer* sections) have discussed issues and concerns regarding natural resources management at 90th RSC lands. This scoping resulted in the elimination of some potential issues, as identified below.

Physiography, Topography, and Geology

Neither the Proposed Action nor its alternatives would affect physiography, topography, or geologic resources.

Petroleum and Mineral Resources

Neither the Proposed Action nor its alternatives would affect petroleum or mineral resources that may be found on 90th RSC lands.

Climate

Neither the Proposed Action nor its alternatives would affect the climate.

Noise Environment

Neither the Proposed Action nor its alternatives would affect 90th RSC noise environments. Proposed natural resources management would not create significant noise.

Hazardous and Toxic Materials

Neither the Proposed Action nor its alternatives would affect generation or cleanup of hazardous or toxic materials. If such materials were discovered during natural resources management activities, this information would be reported to the Environmental Division for action, if needed.

Socioeconomics

Neither the Proposed Action nor its alternatives would have any significant effects on socioeconomic factors in any regions where the 90th RSC manages lands.

Environmental Justice

Executive Order No. 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* [59 Federal Regulation No. 32], issued in February 1994, provides that “each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations”. The Proposed Action and its alternatives would be confined to 90th RSC lands. Neither the Proposed Action nor its alternatives would have significant or disproportionate adverse effects on minority or low-income populations.

Environmental Health and Safety Risks for Children

Executive Order No. 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, [62 Federal Regulation No. 78] was issued in April 1997. This Executive Order directs each federal agency to “ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health or safety risks”. Sensitive areas for exposure to children are schools and family housing areas. Environmental health and safety risks are attributable to products that a child might come in contact with or ingest as well as safety around 90th RSC lands. Proposed natural resources management is within boundaries of 90th RSC lands. Neither the Proposed Action nor its alternatives would have significant or disproportionate adverse effects on children or pose health or safety risks.

1.7.6 Interagency Coordination and Public Review

Interagency coordination is invited through the INRMP/EA development process using personal communications and reviews of drafts. Drafts of this INRMP/EA are used to inform decision makers and the public of likely environmental and socioeconomic consequences of implementing the Preferred Alternative and its alternatives. Native American groups that may be influenced by proposed actions

within this INRMP are notified of the development of this INRMP/EA and are invited to participate, per the *American Indian and Alaska Native Policy* (Department of Defense 1998).

Comments received during meetings and discussions, as well as responses to requests for reviews with agency representatives (Appendix 1.7.6), Indian tribes, or members of the general public, were used for development of the final INRMP/EA. The public, Native American tribes (see Section 1.8.4, *Native American Tribes*), and agencies were notified of the findings and conclusions of the EA by announcement of the Finding of No Significant Impact in local newspapers and the availability of the INRMP/EA for public review for 30 days prior to implementation of the Preferred Action, this INRMP, by the 90th RSC. Since site-specific proposed actions within this INRMP are confined to Seagoville USARC, the Finding of No Significant Impact was published in the *Seagoville Suburbia News*, and the INRMP was available in the Seagoville City Library.

1.8 Responsible and Interested Parties

1.8.1 90th Regional Support Command

Commanding General

The Commanding General of 90th RSC implements policies and directives of the Department of the Army and the Installation Management Agency (Army Reserve). The Commanding General bears ultimate responsibility for management of natural resources within the 90th RSC, including their land and wildlife. The Commanding General's support infers support by all other commands on the installation. Acting through the Command Group, personal and special staff, directors, and separate commanders, the Commanding General is responsible for (Department of the Army 1995a):

- providing for funding and staffing of natural resources management professionals and other resources required to effectively manage natural resources on the installation;
- planning land utilization to avoid or minimize adverse effects on environmental quality and provide for sustained accomplishment of the mission;
- entering into appropriate cooperative plans (16 USC 670a) with state and federal conservation agencies for the conservation and development of fish and wildlife, soil, outdoor recreation, and other resources;
- ensuring the functioning of an Environmental Quality Control Committee;
- ensuring ongoing and timely coordination of current and planned land uses between mission, natural resources, environmental, legal, and master planning;
- inspecting and reviewing mitigation measures that have been implemented or recommended for the protection of natural resources as prescribed in environmental documentation in accordance with AR 200-2 (Department of the Army 2002);
- ensuring all installation land users are aware of and comply with procedures and requirements necessary to accomplish objectives of this INRMP together with laws, regulations, and other measures designed to comply with environmental quality objectives; and
- appointing a natural resources management professional as the 90th RSC Natural Resources Coordinator.

90th RSC Environmental Division

The 90th RSC will maintain an organization with the resources available to accomplish the INRMP. The Environmental Division is responsible for (Department of the Army 1995a):

- developing and implementing programs to ensure the inventory, delineation, classification, and management of all applicable natural resources to include: wetlands, scenic areas, endangered and threatened species, sensitive and critical habitats, and other natural resource areas of special interest;
- providing for the training of natural resources personnel;
- implementing this INRMP;
- reviewing all environmental documents (*e.g.*, environmental impact assessments and statements and remedial action plans) and construction designs and proposals to ensure adequate protection of natural resources, ensuring that technical guidance as presented in this INRMP is adequately considered;
- coordinating with local, state, and federal governmental and civilian conservation organizations relative to natural resources management;
- managing all phases of the natural resources program within the 90th RSC with appropriate natural resources management personnel; and
- administering RSC pest control programs, in coordination with the Installation Management Agency (Army Reserve).

Public Affairs Office

The Public Affairs Office is responsible for promoting an understanding of 90th RSC operations among their various publics and providing professional public affairs advice and support to 90th RSC leaders and activities.

Staff Judge Advocate

The Staff Judge Advocate provides legal advice and counsel and services to Command, staff, and subordinate elements of 90th RSC. Specific Staff Judge Advocate responsibilities with regard to integrated natural resources management include:

- conducting legal research and preparing legal opinions pertaining to interpretation and application of laws, regulations, statutes, and other directives;
- coordinating with the Department of Justice, Litigation Division of the Office of the Judge Advocate General, and other governmental agencies on matters pertaining to litigation for the federal government;
- advising 90th RSC on compliance with NEPA; and
- advising the 90th RSC on laws and regulations that affect training land use, management, and compliance.

Inspector General

The 90th RSC Inspector General will determine whether the provisions of DoD Instruction 4715.3 are being adequately accomplished in accordance with this INRMP and appropriate Army regulations.

807th Medical Command

Since this INRMP includes site-specific proposed actions for Seagoville USARC, the 807th Medical Command has a special responsibility for the implementation of this INRMP. 807th Medical Command personnel conduct day-to-day operations for the operation of the Reserve Center and its training lands. The 807th receives natural resources management support from the 90th RSC, but it is directly responsible for the use of training lands at the USARC.

1.8.2 Other Defense Organizations

1.8.2.1 Installation Management Agency (Army Reserve)

The Installation Management Agency (Army Reserve), located in Atlanta, Georgia is responsible for providing command and technical supervision to the 90th RSC natural resources programs by (Department of the Army 1995a):

- assisting with program implementation and conducting staff visits,
- reviewing natural resources management plans and programs, and
- ensuring that effective natural resources stewardship is an identifiable and accountable function of management.

The Installation Management Agency (Army Reserve) will conduct an onsite evaluation of this natural resources program at least once every three years and will act as trustee over the overall natural resources program.

1.8.2.2 Army Environmental Center

The Army Environmental Center, located at Aberdeen Proving Ground, Maryland, provides oversight, centralized management, and execution of Army environmental programs and projects. It has support capabilities in the areas of NEPA, endangered species, cultural resources, environmental compliance, and related areas.

1.8.2 U.S. Fish and Wildlife Service

The USFWS provides technical advice for management of natural resources on 90th RSC lands, particularly endangered and threatened species (if any were to be confirmed on 90th RSC lands). Department of Army Regulation 200-3 (Department of Army 1995a), Chapter 11, provides guidance to be followed by the 90th RSC when dealing with the USFWS for endangered species management.

The USFWS is a signatory cooperator in implementation of this INRMP in accordance with the Sikes Act. Appendix 1.7.6 includes recommendations made by the USFWS to improve this INRMP. Appendix 1.8.3.1 contains specific items of agreement among the USFWS, Texas Parks and Wildlife Department, and the 90th RSC, as required by the Sikes Act.

1.8.3 State Agencies

1.8.3.1 Texas Parks and Wildlife Department

The mission of the Texas Parks and Wildlife Department (TPWD) is stewardship of Texas's fish, wildlife, park, and/or outdoor recreation resources in the best, long-term interests of the people and those resources. TPWD is responsible for management of most fish and wildlife within the state, including those on federal lands. The agency also is responsible for maintaining lists of Texas wildlife of special

concern, none of which were found on Seagoville USARC. TPWD is responsible for enforcement of fish and wildlife laws on Seagoville USARC.

TPWD has a Biological Conservation Database as part of the NatureServe Network with comparable programs in all 50 states, most Canadian provinces, and 14 Latin American countries. The heritage program maintains the most comprehensive databases on state rare plant and animal species and natural communities. This information is a compilation of historical records from museum and herbarium collections, as well as from field surveys.

The TPWD is a signatory cooperator in implementation of this INRMP. Appendix 1.7.6 includes recommendations made by TPWD to improve this INRMP. Appendix 1.8.3.1 contains specific items of agreement among TPWD, USFWS, and the 90th RSC, as required by the Sikes Act.

1.8.3.2 Other State Wildlife Agencies

State wildlife agencies in Arkansas, Louisiana, New Mexico, and Oklahoma are potential partners in implementation of this INRMP. However, since 90th RSC facilities in these states do not meet Sikes Act Improvement Act requirements for INRMPs, these agencies are not required to concur with actions within this INRMP. If lands are added by the 90th RSC within these states that meet requirements for an INRMP or if significant natural resources are found on 90th RSC lands within these states, this INRMP would be modified to specifically include the appropriate state wildlife agency as an INRMP partner, consistent with the Sikes Act Improvement Act.

1.8.3.3 State Historic Preservation Offices

State Historic Preservation Offices (SHPO) administer historic preservation programs and are responsible for overseeing the implementation of the National Historic Preservation Act in Arkansas, Louisiana, New Mexico, Oklahoma, and Texas. SHPOs serve as repositories for the location of archeological sites within 90th RSC lands. SHPOs work with the 90th RSC Environmental Coordinator in recording site information and providing consultation for site protection and mitigation. These activities may affect certain natural resources management on 90th RSC lands.

1.8.4 Native American Tribes

The United States has a unique legal relationship with Indian tribal governments as set forth in the Constitution of the United States, treaties, statutes, executive orders, and court decisions. Since the formation of the Union, the United States has recognized Indian tribes as domestic dependent nations under its protection. Executive Order 13175 and the *American Indian and Alaska Native Policy* (Department of Defense 1998) establish regular and meaningful consultation and collaboration with Indian tribal governments. The 90th RSC provides a process that permits elected officials and other representatives of Indian tribal governments to provide meaningful and timely input on actions or policies that might be of tribal interest, such as those that affect sacred or Indian cultural sites.

The 90th RSC is informing all federally-recognized tribes that have interests within areas near 90th RSC lands (as defined in the Integrated Cultural Resources Management Plan [Parsons Engineering Science, Inc. 2002]) of the development of this INRMP. If such tribes want to review a draft of this INRMP, it will be provided.

However, this INRMP includes site-specific projects only for Seagoville USARC. Thus, federally-recognized tribes that are most likely to be interested (modified from the list in the Integrated Cultural

Resources Management Plan [Parsons Engineering Science, Inc. 2002]) with regard to site-specific INRMP issues include the following.

Name of Party	Contact Name and Title	Contact Information
Alabama-Coushatta Tribes of Texas	Mr. Kevin P. Battise, Chairman	Route 3, Box 640 Livingston, TX 77351 Phone # 409-563-4391
Apache Tribe of Oklahoma	Mr. Gene Maroquin, Chairman	P.O. Box 1220 Anadarko, OK 73005 Phone # 405-247-9493
Caddo Indian Tribe	Ms. LaRue Parker, Chairwoman	P.O. Box 487 Binger, OK 73009 Phone # 405-656-2344
Chickasaw Nation, Oklahoma	Mr. Bill Anoatubby, Governor	P.O. Box 1548 Ada, OK 74821 Phone # 580-436-2603
Comanche Indian Tribe, Oklahoma	Mr. Johnny C. Wauqua, Chairman	P.O. Box 908 Lawton, OK 73502 Phone # 580-492-4988
Kickapoo Traditional Tribes of Texas	Mr. Raul Garza, Chairman	HC 1, Box 9700 Eagle Pass, TX 78852 Phone # 830-773-2105
Kiowa Indian Tribe of Oklahoma	Mr. Billy Evans Horse, Chairman	P.O. Box 369 Carnegie, OK 73015 Phone # 405-654-1975
Mescalero Apache Tribe	Ms. Sara Misquez, President	P.O. Box 227 Mescalero, NM 88340 Phone # 505-464-4494
Tonkawa Tribe of Indians of Oklahoma	Mr. Donald Patterson, President	P.O. Box 70 Tonkawa OK 74653 Phone # 580-628-2561
Wichita Tribe of Oklahoma	Mr. Gary McAdams, President	P.O. Box 729 Anadarko, OK 73005 Phone # 405-247-2425

1.9 Management Common to 90th RSC Lands

Many natural resources-related projects are applicable or potentially applicable to all lands managed by the 90th RSC. These are described within this section. In a few cases, project objectives described below are site-specific to Seagoville USARC; they are included here to avoid redundancy in Chapter 2.

Programs are described in terms of their status and recent history (**Current Management**) followed by proposed project(s) (**Proposed Management**). These projects are intended to be Environmental Program Requirements submissions to integrate implementation of this INRMP to the budget process (see Section 3.4.2, *Environmental Program Requirements*).

Projects are described in a goal(s)-objective(s) format to provide process descriptions that are compatible with adaptive management analyses and overall INRMP implementation monitoring processes. All goals and objectives are summarized in tabular format in Appendix C.

Each project has a summary description at the beginning of the Proposed Management section. The format is as follows:

Project: Title

Justification: Laws, regulations, or policy compliance (*e.g.*, participation in regional initiatives; Sikes Act, Endangered Species Act, AR 200-3, stewardship)

Funding Priority: Proposed or actual budget classification

Project Timing: Dates to be accomplished, by objective (*e.g.*, 2003, 2003-05, indefinitely, uncertain)

Regulatory Coordination: Agencies with whom coordination is required

1.9.1 Integrated Natural Resources Management Planning

1.9.1.1 Current Management

This INRMP must be reviewed/revised annually by the 90th RSC, as stipulated in AR 200-3 (Department of the Army 1995a), and updated every five years, as required by the Sikes Act. The list of goals and objectives (Appendix 2.2) can be used to guide the review and adjust programs, per the adaptive management process.

1.9.1.2 Proposed Management

Project: Integrated Natural Resources Management Planning

Justification: Sikes Act compliance, AR 200-3, stewardship

Funding Priority: Class 0

Project Timing: Objective 1 - annually; Objective 2 - 2007

Regulatory Coordination: USFWS and appropriate state wildlife agencies

Goal. Use coordinated planning to fully integrate the natural resources program on 90th RSC lands.

Objective 1. Internally review this INRMP annually using project goals and objectives to guide reviews; revise projects and budgets as required; coordinate significant changes with the USFWS and appropriate state wildlife agencies.

Objective 2. Update the INRMP at least every five years or when major changes are made to the natural resources program; coordinate this update with the USFWS and appropriate state wildlife agencies. (This will require the next INRMP update to begin in 2007.)

1.9.2 Federal and State-listed Species Management

1.9.2.1 Current Management

Federal-listed Species

The federal Endangered Species Act of 1973, as amended (Act) requires lands under the jurisdiction of the Department of the Army to conserve listed species. As defined in the Act, conservation is the use of all methods and procedures necessary to bring any listed species to the point where protections provided by the Act are no longer necessary. Section 7 of the Act requires the Army to formally consult and confer with the USFWS if any action by the Army may affect a listed species or critical habitat.

AR 200-3 (Department of the Army 1995a) states (Section 11-2(a-e)) that the Army has five primary requirements under the Endangered Species Act:

- 1) to conserve listed species,
- 2) not to “jeopardize” listed species,
- 3) to “consult” and “confer”,
- 4) to conduct a biological assessment, and
- 5) not to “take” listed fish and wildlife species or to remove or destroy listed plant species.

The 90th RSC is committed to these five primary requirements, but there are no federal-listed species known to occur on 90th RSC lands. A specific survey for such species at Seagoville USARC (Parsons 2003 and Appendix 2.1.6) found no federal-listed species and concluded that none are expected to be found.

Within the spirit and intent of the Sikes Act Amendments of 1997 and the Endangered Species Act, this INRMP serves to provide *adequate management or protection*, a term that originated in the definition of occupied habitat from Section 3 of the Endangered Species Act. If *adequate management or protection* is already in place, then additional special management (*i.e.*, critical habitat designation) is not required when lands are found to contain physical and biological features essential to the conservation of the species. *Adequate management or protection* is provided by a legally operative plan that addresses the maintenance and improvement of primary constituent elements important to the species and manages for the long-term conservation of the species. This reasoning leads to the conclusion made by the U.S. Fish and Wildlife Service that, where applicable, federal critical habitat designation is not warranted if the INRMP includes the following three criteria:

1. The plan provides a conservation benefit to the species. Cumulative benefits of the management activities identified in a management plan, for the length of the plan, must maintain or provide for an increase in a species’ population or the enhancement or restoration of its habitat within the area covered by the plan [*i.e.*, those areas deemed essential to the conservation of the species]. A conservation benefit may result from reducing fragmentation of habitat, maintaining or increasing populations, ensuring against catastrophic events, enhancing and restoring habitats, buffering protected areas, or testing and implementing new conservation strategies.

2. The plan provides certainty that the management plan will be implemented. Persons charged with plan implementation are capable of accomplishing objectives of the management plan and have adequate funding for the management plan. They have the authority to implement the plan and have obtained all necessary authorizations or approvals. An implementation schedule (including completion dates) for the conservation effort is provided in the plan.

3. The plan provides certainty that the conservation effort will be effective. The following criteria will be considered when determining the effectiveness of the conservation effort. The plan includes (1) biological goals (broad guiding principles for the program) and objectives (measurable targets for achieving the goals); (2) quantifiable, scientifically valid parameters that will demonstrate achievement of objectives and standards for these parameters by which progress will be measured are identified; (3) provisions for monitoring and, where appropriate, adaptive management; (4) provisions for reporting progress on implementation (based on compliance with the implementation schedule) and effectiveness

(based on evaluation of quantifiable parameters) of the conservation effort are provided; and (5) a duration sufficient to implement the plan and achieve benefits of its goals and objectives.

Other Sensitive Species

The 90th RSC is sensitive to those species listed as endangered or threatened under state law, but not federal-listed. The 90th RSC will cooperate with state authorities to conserve these species. At a minimum, the 90th RSC will document the distribution of these species and set forth agreed conservation measures. No state-listed species are confirmed on 90th RSC lands. A specific survey for such species at Seagoville USARC (Parsons 2003 and Appendix 2.1.6) found no Texas-listed species and concluded that none are expected to be found.

The 90th RSC recognizes its commitment to obtaining information regarding other sensitive species, particularly as they relate to the use of 90th RSC lands and relationships to military use of these lands. It is not suggested that special surveys be conducted or management practices be drastically altered to accommodate these species in the same manner as federal-or state-listed species. As conscientious land and wildlife stewards, however, it is important to exhibit that the 90th RSC is aware that these species are potentially declining.

1.9.2.2 Proposed Management

Project: Federal- and State-listed Species Management

Justification: Sikes Act compliance, Endangered Species Act, stewardship

Funding Priority: Class 0

Project Timing: Objectives 1 and 5 - 2003; other objectives - as needed

Regulatory Coordination: USFWS and appropriate state wildlife agencies, as needed

Goal 1. Manage federal-listed endangered, threatened, or candidate species in compliance with the Endangered Species Act.

Objective 1. Perform threatened and endangered species surveys on 90th RSC lands that have potential to support federal listed species.

Objective 2. If any listed or candidate species are confirmed, develop monitoring programs that meet their needs.

Objective 3. If any federal-listed species are confirmed, update this INRMP to meet the three criteria established by the USFWS with regard to avoiding critical habitat designation.

Objective 4. Coordinate with the USFWS, as necessary, to develop endangered species management plans for any federal-listed threatened, endangered, or candidate species and their habitats that are confirmed on 90th RSC lands, with exception of occasional migrants.

Goal 2. Monitor and manage nonfederal-listed, special status plant and animal species to the degree possible with available funding.

Objective 5. Ensure planning level surveys specifically include nonfederal-listed and other special status plant and animal species.

Objective 6. Consider state-protected species in all 90th RSC actions.

1.9.3 Water Resources Management

AR 200-1, *Environmental Protection and Enhancement*, (Department of the Army 1997c) establishes the following objectives for water resources on Army lands.

- Conserve all water resources.
- Control or eliminate sources of pollution to surface or ground waters through conventional or innovative treatment systems.
- Demonstrate leadership in attaining the national goal of zero discharge of water pollutants.
- Provide drinking water that meets applicable standards.
- Cooperate with federal, state, and local regulatory authorities in forming and implementing water pollution control plans.
- Control or eliminate runoff and erosion through sound vegetative and land management practices.
- Consider nonpoint source pollution abatement in all construction, installation (*i.e.*, facility) operations, and land management plans and activities.

Attainment of most of the above objectives is not the responsibility of Army natural resources programs, but some of them, especially the last two, are clearly natural resources management concerns.

1.9.3.1 Current Management

Groundwater monitoring and management are not natural resources responsibilities within the Army and thus are not a required part of this INRMP. Section 2.1.6.3, *Water Resources*, discusses surface waters on Seagoville USARC. There is potential for water contamination from military activities, but this is minimized by spill prevention and countermeasures training and contingency plans. There is some potential for water contamination from off-site agricultural and residential practices, such as fertilization, pesticide and/or herbicide applications, sedimentation, etc.

1.9.3.2 Proposed Management

Below objectives are general to other projects described in this INRMP and they do not require funding beyond what is in these other projects. Thus, a specific project for water resources management is not required. However, the below goal and objectives are appropriate to list.

Goal. Protect water quality on 90th RSC lands.

Objective 1. Control or eliminate runoff and erosion that could affect surface waters.

Objective 2. Consider nonpoint source pollution abatement in construction, operations, and land management plans and activities.

Objective 3. Use site-specific water testing for natural resources and other programs as needed during the next five years.

1.9.4 Wetlands Management

1.9.4.1 Current Management

Inventory

A specific survey for wetlands (both jurisdictional and non-jurisdictional) at Seagoville USARC (Parsons 2003 and Appendix 2.1.6) found eight non-jurisdictional wetland areas and one jurisdictional area (stream channel).

Management

No-net-loss of wetlands is required by Executive Order 11990, *Protection of Wetlands*. The Clean Water Act (1977), Section 404, requires that a permit be obtained for any activity that may affect “waters of the United States, including wetlands”. The U.S. Army Corps of Engineers has the primary responsibility for administering the Section 404 permitting process. Activities in wetlands that require federal permits include but are not limited to: placement of fill material, ditching activities when the excavated material is sidecast, mechanized land clearing, land leveling, most road construction, and dam construction. The Corps of Engineers permit process requires coordination with the USFWS and the SHPO to allow for the assessment of potential impacts to protected species and cultural resources.

Environmental review would be the primary means of detecting threats to wetlands on 90th RSC lands if such wetlands were confirmed. If necessary, projects with potential impacts would be referred to the Corps of Engineers to determine if jurisdictional wetlands are implicated, establish mitigation procedures, and/or obtain permits. Wetland-affecting projects require NEPA documentation (Section 1.9.9, *National Environmental Policy Act Implementation*).

1.9.4.2 Proposed Management

Project: Wetlands Management

Justification: Compliance with Clean Water Act, stewardship

Funding Priority: Class 0

Project Timing: Objective 2 - 2003, other objectives - ongoing indefinitely

Regulatory Coordination: U.S. Army Corps of Engineers (Clean Water Act objectives)

Goal 1. Maintain a baseline database on wetlands resources on 90th RSC lands.

Goal 2. Manage wetlands to ensure “no net loss” per Executive Order 11990.

Objective 1. Perform a wetlands survey on Seagoville USARC in conjunction with the planning level survey (sections 1.9.2, *Federal- and State-listed Species Management* and 2.2.1, *General Fish and Wildlife Management*. (Note: This has been completed.)

Objective 2. Use site-specific surveys to evaluate wetland resources, including jurisdictional status, if any wetland impacts are proposed.

Objective 3. Use the environmental review process to protect wetlands.

1.9.5 Revegetation

1.9.5.1 Current Management

The U.S. Army has a policy of assuring that planning for soil-disturbing activities includes revegetation with native plant species. This policy implements the Presidential Memo on *Environmentally and Economically Beneficial Practices on Federal Landscaped Grounds* (Office of the President 1994) and Executive Order 13112, *Invasive Species* (Office of the President 1999) and follows the spirit and intent of the Department of Defense's Biodiversity initiative (The Keystone Center 1996). This policy helps ensure that soil disturbances do not lead to the spread of exotic and noxious species. Revegetation to re-establish herbaceous cover not only prevents the spread of noxious species, but it also enhances wildlife habitat and natural watershed processes.

1.9.5.2 Proposed Management

Project: Revegetation

Justification: Maintaining the capability of training lands to support the military mission (Sikes Act), compliance with the Clean Water Act, compliance with Executive Order 13112 and the Presidential Memo, stewardship

Funding Priority: Class 0

Project Timing: Objective 1 - 2005, objective 2 - as needed

Regulatory Coordination: None required

Goal. Use native, non-invasive species to restore soil and vegetative integrity following soil-disturbing projects.

Objective 1. Work with state and local agencies to develop revegetation lists that would establish lists of plants, planting seasons, seed or plant sources, site requirements, and other assistance for revegetation of damage areas. (Note: This has been completed for Seagoville USARC (Parsons 2003 and Appendix 2.1.6).)

Objective 2. Perform revegetation using native, non-invasive species, as needed.

1.9.6 Data Storage, Retrieval, and Analysis

The capability to store, retrieve, and analyze data is central to professional management of natural resources, and it is essential to implementing adaptive management aspect of ecosystem management. The 90th RSC is committed to providing efficient, cost-effective systems for data storage and analysis.

1.9.6.1 Current Management

Microcomputer System

Microcomputers are essential to the routine operation of efficient natural resources management organizations. The volume of data is too substantial to handle without computers, and routine administrative tasks are accomplished considerably more efficiently with computers.

The 90th RSC utilizes various software programs for data storage and analysis for natural resources management purposes. The 90th RSC is well-equipped with regard to microcomputers, having quality

personal computers with appropriate peripherals. Needs with regard to the Environmental Division computer system are normal upgrades and replacement of hardware and software.

Geographic Information System

A GIS allows users to manipulate spatial data (e.g., maps, aerial photos, satellite images) in a similar fashion as a data management program allows the analyses and presentation of mathematical data. Data can be purchased and converted into most software formats, or it can either be scanned or digitized directly from maps or aerial photographs. A GIS can analyze different map layers to show relationships among map layers.

A common use for GIS is in construction projects, such as building a range facility. For example, criteria for this project might be that the facility be located within ¼ mile of a paved road, exclude archeological and endangered species sites, have less than 2% slope, and have relatively stable soils. A GIS could produce a map with all areas having these features. A GIS could also be used to show the relative ability of Seagoville USARC to support specific types of future military training missions.

The 90th RSC has GIS capabilities and is developing GIS databases that include natural resources on its lands. The planning level survey for Seagoville USARC (Parsons 2003 and Appendix 2.1.6) includes GIS databases and a graphical user interface.

1.9.6.2 Proposed Management

Project: Data Storage, Retrieval, and Analysis

Justification: Sikes Act (implementation of INRMP) and other federal laws affected by this INRMP, support of the military mission, stewardship

Funding Priority: Class 0

Project Timing: Objective 1 and 3 - as needed, objective 2 - 2003

Regulatory Coordination: None required

Goal. Store, analyze, and use data in an efficient, cost-effective manner.

Objective 1. Upgrade microcomputer hardware and software as needed during the next five years.

Objective 2. Obtain desktop GIS capability to support the 90th RSC natural resources program.

Objective 3. Develop or obtain databases needed to support the 90th RSC natural resources program, including planning level survey results.

1.9.7 Pest Management

1.9.7.1 Current Management

Pest management programs on Army lands are regulated via Army Regulation 200-5 (Department of Army 1999a). If noxious weeds included in provisions of the Plant Protection Act of 2000 (replaces Federal Noxious Weed Act) are found on 90th RSC lands, species-specific plant control may be required. Non-native and/or noxious weeds pose threats to native habitats, endangered species, and plant community composition and diversity. More specifically, they threaten wetland ecosystems, complicate land restoration projects, add to the cost of pest management, and in general, threaten ecosystem

functionality. Some noxious weeds are directly poisonous or injurious to man, livestock, and wildlife. The 90th RSC is dedicated to prevention of introduction of invasive species as well as their control, per Executive Order 13112, *Invasive Species*.

1.9.7.2 Proposed Management

Project: Pest Management Support

Justification: Compliance with Executive Order 13112, *Invasive Species*; stewardship

Funding Priority: Class 0

Project Timing: All objectives - ongoing indefinitely

Regulatory Coordination: Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended

Goal 1. Control noxious and invasive exotic plants to support the military mission, promote sustained ecosystem functionality, favor native species biodiversity, and add to the quality of life in the immediate areas surrounding 90th RSC lands.

Objective 1. Survey for federal-listed noxious and invasive exotic plants on Seagoville USARC as part of planning level surveys described in sections 1.9.2, *Federal- and State-listed Species Management*, 1.9.4, *Wetland Management*, and 2.2.1, *General Fish and Wildlife Management*.

Objective 2. Eliminate and control federal-listed noxious and invasive exotic plants on 90th RSC lands, if these are confirmed.

Objective 3. When pesticides are used, use them in a manner to minimize impacts to sensitive animal and plant species, and follow precautionary statements on labels regarding contamination of water if pesticides are sprayed near wetlands or other waters (such as the intermittent tributary to Hickory Creek at Seagoville USARC).

1.9.8 Natural Resources Enforcement

1.9.8.1 Current Management

Natural resources law enforcement on 90th RSC lands is primarily provided by state wildlife agencies. If federal laws were involved, the USFWS could become involved.

1.9.8.2 Proposed Management

Natural resources law enforcement is a required element of INRMPs by law; however, a specific project is not necessary since the function is entirely performed by other agencies. However, it is appropriate to list the goal and objective for natural resources-related enforcement on 90th RSC lands

Goal. Assure legal compliance of military and civilian activities with regard to natural resources on 90th RSC lands.

Objective. If required, support state wildlife agencies and the USFWS with regard to natural resources enforcement on 90th RSC lands.

1.9.9 National Environmental Policy Act Implementation

NEPA was created to disclose environmental concerns with human activities and resolve them to the best degree possible. Implementing NEPA regulations (AR 200-2, *Environmental Analysis of Army Actions* (Department of the Army 2002)) require mitigation of damage to the environment. NEPA was not legislated to stop actions. Rather, it was crafted to identify environmental problems, providing an opportunity to resolve them using planning at early stages of project development.

1.9.9.1 Current Management

The 90th RSC Environmental Division has primary responsibility for NEPA implementation on 90th RSC lands. The NEPA Coordinator is responsible for ensuring that NEPA documentation is provided for projects, training missions, and other governmental actions. The process of reviewing and preparing NEPA documentation often involves direct coordination with various natural resources partners, particularly those listed in Section 1.8, *Responsible and Interested Parties* of this INRMP.

NEPA Documentation

If a proposed action qualifies for one of the categorical exclusions, no analytical environmental document is required. The most common NEPA document prepared for projects, which impact natural resources, is a record of environmental consideration. This simple documentation generally works well for routine projects, such as routine military exercises, borrow sites, small digging projects, and similar projects where natural sites are not significantly damaged.

Environmental assessments are required when a categorical exclusion is not met. This can happen when new military exercises or ranges are planned, when the action involves a wide geographic area, or when wetlands or other sensitive plant communities may be involved. Examples include erosion control projects or new military missions. EAs require the Commander's approval, publishing a Finding of No Significant Impact, and waiting 30 days for public comment.

If a Finding of No Significant Impact is not appropriate, the following options are available:

- modify the action to remove significant impacts,
- mitigate significant adverse impacts,
- drop the action, or
- publish a Notice of Intent to prepare an Environmental Impact Statement.

The 90th RSC has no NEPA documentation for the natural resources program as a whole. The EA within this INRMP fulfills that requirement.

Mitigation

Mitigation is required by NEPA and AR 200-2 when a proposed action already affects the environment. Mitigation is an excellent way to either consider less damaging options or provide means to offset damage to the environment. Below are five general mitigation tactics:

Avoidance: Avoid adverse impacts on natural resources by not performing activities that would result in such impact. Confine construction to areas where no significant impact would occur to natural resources.

Limitation of action: Reduce the extent of an impact by limiting the degree or magnitude of the action. Minimize impacts of construction projects by arranging timing, location, and magnitude of actions so that they have the least impact on natural resources.

Restoration of the environment: Restore the environment to its previous condition or better. This could involve reseeding and/or replanting an area with native plants after it has been damaged by construction projects.

Preservation and maintenance operations: Design the action to reduce adverse environmental effects. This could involve actions such as monitoring and controlling pollution, contamination, disturbance, or erosion caused by construction projects that would impact natural resources.

Replacement: Replace the resource or environment that will be impacted by construction projects. Replacement can occur in-kind or otherwise, on-site, or at another location. This could involve creation of the same type or better quality habitat for a particular impacted fish or wildlife species or creation of habitat for another species.

Mitigation that is identified in a FNSI is a “must fund” for environmental purposes. This provides a reliable mechanism to fund mitigation included in NEPA documents.

NEPA and Natural Resources Management

The 90th RSC Environmental Division ensures activities (as described in this INRMP) are properly planned, coordinated, and documented. The NEPA Coordinator also uses NEPA to identify problems associated with other organizations’ projects that may affect 90th RSC natural resources.

An important offshoot of proper NEPA implementation is that projects can be enhanced by the effort. Siting is one of the most common examples of project enhancement. When natural resources managers understand mission/project requirements in terms of land features and requirements, they often not only offer more potential site options to mission or project planners but also offer alternatives to avoid future environmental conflicts.

1.9.9.2 Proposed Action

Project: Use of NEPA

Justification: Compliance with NEPA and other federal laws affected by individual projects, stewardship

Funding Priority: Class 0

Project Timing: Objective 1 - 2003; other objectives - ongoing indefinitely

Regulatory Coordination: None

Goal 1. Use NEPA to identify projects and activities on 90th RSC lands that might impact natural resources and work with project planners to resolve issues early in the planning process.

Goal 2. Use NEPA to ensure this INRMP is documented according to the spirit and letter of NEPA.

Goal 3. Help the 90th RSC comply with NEPA.

Objective 1. Document effects of implementation of this INRMP on 90th RSC lands through an EA that is embedded in this document.

Objective 2. Reference this INRMP/EA in descriptions of affected environment to reduce verbiage in other NEPA documents.

Objective 3. Classify mitigation as a “must fund” for budgetary purposes.

1.9.10 Cultural Resources Protection

Cultural resources management on 90th RSC lands is provided in accordance with Section 106 and Section 110 of the National Historic Preservation Act (NHPA) (16 USC Section 470, as amended), the Archeological Resources Protection Act (16 USC Section 470aa-47011), the American Indian Religious Freedom Act (42 USC), the Native American Graves Protection and Repatriation Act (25 USC Section 3001 *et seq.*), Executive Order 11593 (*Protection and Enhancement of Cultural Environment*), DoD Directive 4710.1 (*Archeological and Historic Resources Management*, 1984), and AR 200-4 (*Cultural Resources Management*).

1.9.10.1 Current Management

Management of cultural resources on 90th RSC lands is a mission of the 90th RSC Environmental Coordinator. The Environmental Coordinator is responsible for all aspects of cultural resources management, including coordination with SHPOs, Native American tribal organizations, and the public, as appropriate. Cultural resources occurring on 90th RSC lands are described in the Integrated Cultural Resources Management Plan (Parsons Engineering Science, Inc. 2002). Cultural resources occurring at Seagoville USARC are discussed in this INRMP Section 2.1.8.1, *Cultural Resources*.

Cultural Resources Evaluation

Eligibility of archeological sites and buildings for inclusion in the National Register of Historic Places (NRHP) is the principal criteria determining management prescriptions. Generally, sites fall into one of three categories with regard to NRHP eligibility.

Eligible: These sites have been determined eligible for the NRHP and therefore are subject to protection. They will not be affected without consultation per Section 106 of the National Historic Preservation Act and development of a plan to mitigate adverse effects.

Ineligible: These sites have been determined ineligible for the NRHP and do not require protection from adverse effects.

Potentially eligible (intermediate): Further investigation is required to determine NRHP eligibility. Therefore, these sites are potentially eligible for the NRHP and require the same protection as eligible sites until determinations of eligibility can be made.

Natural Resources Management Implications and Contributions

Natural resources management on 90th RSC lands has little potential to affect cultural resources. Conversely, cultural resources management on these lands does not significantly affect natural resources management. The only natural resource practices with the potential to adversely affect cultural resources would be the repair of damage due to military activities, which could involve excavation, earth moving, and fill deposition that can damage or bury archeological sites. Generally, however, effects to archeological sites from reduced erosion are positive.

Even with proper review, natural resources projects still have some potential to affect archeological sites through accidental discovery. If accidental discovery occurs, 90th RSC personnel would follow required procedures to minimize damage to the sites.

Natural resources management can be used to protect cultural resources sites. Sensitive habitat management usually involves minimizing disturbances, which also protect potential archeological sites from damage. Erosion control projects can be planned to specifically protect sites from erosion.

1.9.10.2 Proposed Action

Project: Cultural Resources Protection

Justification: Compliance with various cultural resources laws and regulations, stewardship

Funding Priority: Class 0

Project Timing: All objectives - ongoing indefinitely

Regulatory Coordination: SHPOs, Native American Tribes, in some cases

Goal 1. Implement this INRMP in a manner consistent with the protection of cultural resources on 90th RSC lands.

Goal 2. Comply with all laws, regulations, and Army guidance regarding cultural resources on 90th RSC lands.

Objective 1. Use results of cultural resources surveys to plan natural resources projects.

Objective 2. Avoid or mitigate adverse effects to cultural resources from natural resources management through proper review and planning. Submit proposed projects as part of NEPA review to the state environmental manager who will coordinate with the SHPO.

Objective 3. Take the following protective measures upon inadvertent discovery of sites that may be related to cultural resources:

- Upon discovery of potential cultural deposits or human remains, cease ground-disturbing activities immediately and report the finding to the Environmental Coordinator.
- Consider alternatives for moving the project to another location.
- Wait for approval from the state environmental manager, who will consult with the SHPO and/or Native American Tribes, as appropriate, before resuming activity at the location.
- Implement any mitigation measures resulting from agreement documents.

Objective 4. If cultural resources are threatened by erosion, use natural resources techniques and projects to protect the resources, if appropriate.

Objective 5. When conducting ground-disturbing or other potential undertakings associated with natural resources management, treat sites as potentially eligible for the National Register of Historic Places until determined otherwise.

2.0 SEAGOVILLE U.S. ARMY RESERVE CENTER (TX 068)

Seagoville USARC is specifically discussed in this INRMP since it is the only property within the 90th RSC that meets policy and legal criteria that require the development of an INRMP. General management techniques described in Section 1.9, *Management Common to 90th RSC Lands* apply to Seagoville USARC as well as those site-specific projects described in this chapter.

2.1 Affected Environment

2.1.1 Location

Seagoville USARC is within the city limits of Seagoville, Texas, approximately two miles from the center of Seagoville. Seagoville is within Dallas County; the USARC is approximately 17 miles southeast from downtown Dallas (Detachment 1, Human Systems Center 1998a). Seagoville is about 12 miles south of Mesquite, TX just off of Highway 175 (Figure 2.1.1a). Seagoville has a population of 11,036 (1999 - www.census.gov).

Figure 2.1.1a. Location of Seagoville USARC, Texas

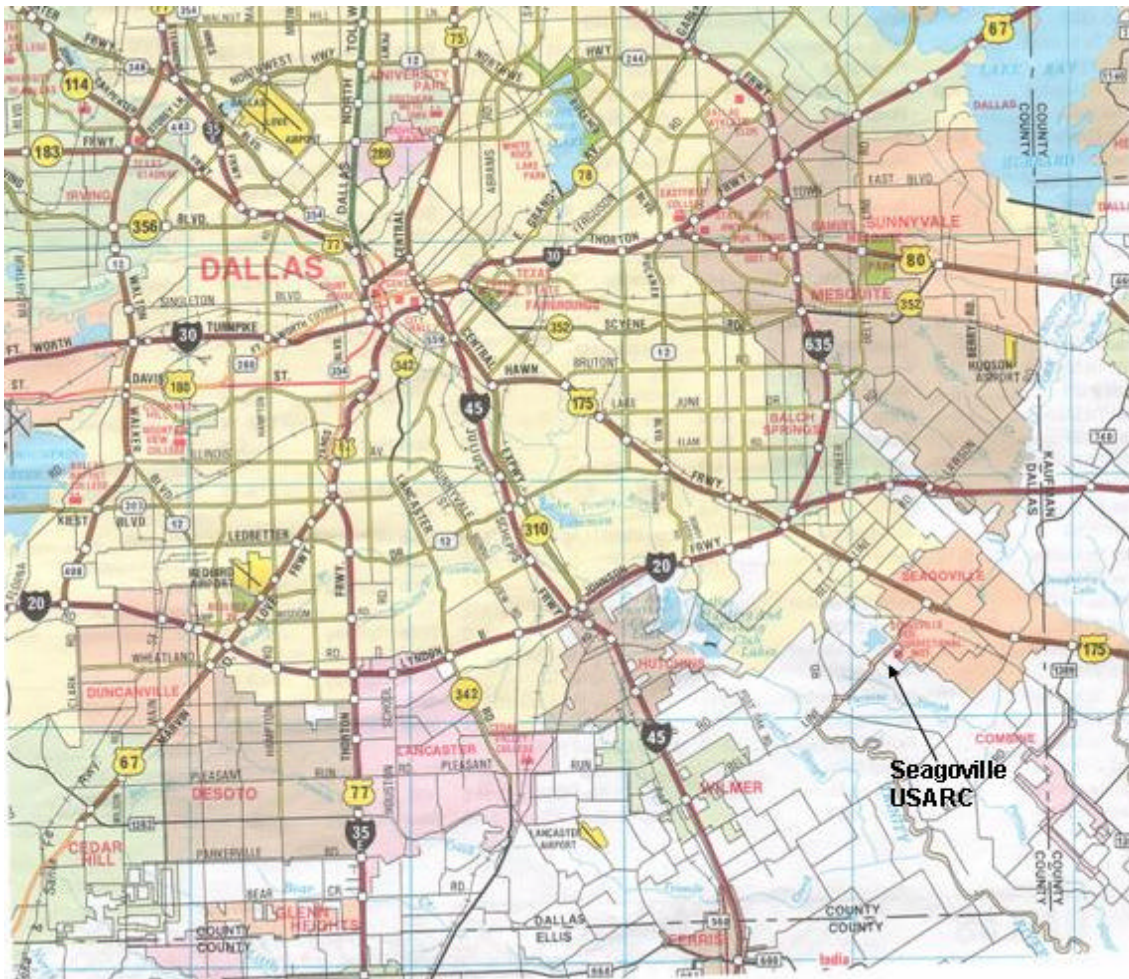


Figure 2.1.1b. Seagoville USARC



A hand-drawn map of training areas, labeled A through H. The map is oriented with a north arrow pointing towards the top right. Area A is a large, irregularly shaped field with a winding path. Area B is a central area with a star-shaped structure. Area C is a hatched area with a dashed circle. Area D is a small rectangular area. Area E is a large rectangular area with a hatched section. Area F is a large area with a hatched section. Area G is a large area with a hatched section. Area H is a small area with a hatched section. A legend shows a hatched box. A north arrow points towards the top right.

Figure 2.1.1b shows an aerial photograph of the USARC and the surrounding area. Figure 2.1.1c shows individual training areas within the Local Training Area (LTA). Notable features in the LTA include training areas A through J (except I), a running track in Training Area E, a storage site with a barn to the west of Training Area J, a Deployable Medical Equipment (DEPMED) site on the northern border, a 25-meter rifle range in Training Area D, a field sanitation training area in Training Area C, Joe Baker Lake recreation area to the south of the main building area, an air/rail loading mockup and Nuclear, Biological and Chemical training site in Training Area B, an intermittent stream that flows through Training Area A, and a driving course with a manmade hill (along the southern boundary) in Training Area A.

2.1.2 Neighbors

Dallas (population 1,016,274) is 17 miles to the northwest. Mesquite, the second largest nearby city (population 116,179), is about 12 miles directly north of Seagoville. Small communities in the area include Crandall (population 1,652) to the southeast, Balch Springs (population 17,406) to the north, and Ferris (population 2,212) to the southwest. (See Figure 2.1.1a). Population data for Dallas and Mesquite are from www.census.gov and are for 1999; other data are from 1990 data. Fort Hood, Texas is about 125 miles to the southwest; Fort Sill, Oklahoma is about 175 miles to the northwest; and Fort Polk, Louisiana is about 225 miles to the southeast.

Seagoville USARC is primarily rural but within Seagoville city limits. The Seagoville Federal Correction Institution is on the northern boundary. Due to high security requirements within the prison, the USARC must coordinate firing on its range and helicopter arrivals/departures with the Correction Institution.

Eastern and southern boundaries adjoin land that is primarily used for grazing, primarily privately-owned, but the Dallas Independent School District has a parcel on the eastern border of the USARC, adjacent to the DEPMED site (Figure 2.1.1.b). The southern portion of the western boundary adjoins a low-density residential area, and the northern portion of the western boundary primarily adjoins commercial properties. The boundary is marked with a chain link fence and signage.

2.1.3 Acreage, Acquisition, and History

In 1973 the Seagoville Federal Correction Institution transferred 205 acres of excess property to the Department of the Army for the Seagoville USARC. Between 1973 and 1979 various Army Reserve units used the land for fragmented training. On August 30, 1979 the Seagoville USARC was completed.

The history of the area is described in the draft Integrated Cultural Resources Management Plan (Parsons Engineering Science, Inc. 2002). The below history was condensed from that document.

During the 18th Century French traders ventured into the region to trade with the Anadarkos, a Caddo tribe residing along the banks of the Trinity River. Anglo-American colonization of Dallas County began during the 1840s. An early settlement established by John Neely Bryan became known as Dallas by 1842. European immigrants moved into the area, particularly from France, Belgium, and Switzerland. Following the Civil War settlers from the southern states migrated into the region. The region's fertile agricultural land, known as the Blacklands, was well-suited for growing cotton, as well as corn and small grains. Dallas, as the center for trade, prospered. Dallas County produced crops and livestock products for trade (Hansen 1969).

Settlement in the areas that would become Seagoville increased during the post-Civil War period. Seago was founded by T.K. Seago in 1876. T.K. Seago established the area's first dry goods and grocery store

on his land and served as the town's postmaster. The town was renamed Seagoville in 1910 by the U.S. Post Office to avoid possible confusion with the town of Sego, Texas.

Transportation and communication dramatically improved with the construction of the Texas and New Orleans Railroad (now known as the Southern Pacific) through Seagoville in 1880. This track marks the northern boundary of Seagoville USARC. The first school in the future town was constructed in 1867; two churches and several businesses were built by the end of the century. One of the largest farms in Texas was located in Seagoville and comprised several thousand acres.

Land containing the present-day USARC was most likely used for agricultural purposes throughout the late 19th and early 20th centuries. A 1900 map shows no structures on the USARC site. During the 1930s the Federal Prison System purchased a large tract, including the present-day USARC site, for a women's detention center. The Seagoville Correctional Institute provided the impetus for an economic boom to the area (Seagoville Chamber of Commerce undated). The Institute used much of the land, including the present-day USARC site, for agriculture.

2.1.4 Military Mission

Resident U.S. Army Reserve units at Seagoville USARC include the following:

- 807th Medical Command;
- 94th General Hospital;
- 965th Dental Company (Area Support);
- C Company, 980th Engineer Battalion;
- 206th Public Affairs Detachment (Broadcast);
- HHD 145th Medical Battalion (Logistics);
- 312th Medical Company (Logistics);
- 340th Medical Detachment (Blood Support);
- 354th Medical Company (Logistics Support); and
- Area Maintenance Support Activity.

A Distance Learning Center (computer laboratory) is scheduled to be added to the Seagoville USARC soon.

The military mission that involves use of the LTA on Seagoville USARC includes the following types of activities:

- use of the DEPMED site, which includes relatively permanent medical use tents on permanent pads and is fenced;
- driver training on the driver course, which includes off-road driving;
- engineer bridging across the small creek;
- use of the physical fitness track;
- bivouacs by local Reserve units;
- reconnaissance, selection and occupation position training (site selection, reconnaissance, site security, locations for unit operations, etc.);
- use of the rifle range by Reserve units and various other agencies (*e.g.*, Federal Bureau of Investigation, Seagoville Federal Correction Institution, Dallas and other local police

departments); common task training (establish training stations, such as first aid, land navigation, map reading);

- force protection training (establish fighting positions, checkpoints, etc.);
- maintenance operations training (operational checks of equipment and field servicing procedures);
- staff training exercises (training and exercise of staff elements and functions); and
- land navigation (compass and map procedures).

The rifle range has been closed for repairs and is expected to open soon. It is used for M-16 and 9mm weapons training by Reserve units and various small arms training by other agencies. The range is bermed downrange and on both sides. Issues concerning the drift of smoke and fumes from the Nuclear, Biological and Chemical facility (*e.g.*, tear gas training) have considerably restricted its use.

Training on the LTA occurs primarily during weekend training periods. Use of the LTA is governed by the *Seagoville Local Training Area Standing Operating Procedures*⁵. Training is requested through Headquarters, 807th Medical Command. Units must prepare a risk management worksheet prior to training, and before- and after-training inspections/inventories are conducted. Use of the firing range is governed by information in the *Range Instruction Handbook, Seagoville Outdoor Firing Range*⁶.

Digging is restricted to Training Area A and only small pits for individual fighting positions may be dug. These positions must be filled prior to leaving the LTA.

2.1.5 Compatibility Issues

Section 1.4, *Relationships Between Natural Resources and the Military Mission* describes general compatibility issues.

Vegetative Resources

The Seagoville LTA has a long history of disturbance, agriculture use, and limited military activities. Little, if any, of the natural vegetation of the Blackland Prairies is evident on the LTA or surrounding areas. Historic use and ongoing periodic mowing as part of facility maintenance have perpetuated an introduced, weedy type of vegetation tolerant to light-moderate disturbance associated with training activities. Current impacts to natural habitats on Seagoville USARC are limited to military and maintenance activities. Neither have significant impacts to the extant vegetation (Detachment 1, Human Systems Center 1998b).

Sensitive Species

No federal- or state-listed threatened or endangered species are known to occur in the immediate vicinity of Seagoville LTA (Detachment 1, Human Systems Center 1998b, Parsons 2003 and Appendix 2.1.6). Active management and protection of potential habitats within the LTA preclude potential impacts to listed species.

Cultural Resources

Seagoville USARC has been surveyed (Phase 1) for historic and prehistoric sites. No cultural resources eligible or potentially eligible for listing on the National Register of Historic Places occur on the USARC

⁵ Prepared by Security, Plans, Operations and Training Section, 807th Medical Brigade (1 July 1996).

⁶ Prepared by Security, Plans & Operations, 807th Medical Command.

(Parsons Engineering Science, Inc. 2002). The likelihood of significant cultural resources occurring on Seagoville USARC is minimal. Accidental discovery of cultural resources during training exercises could disrupt training if it were to occur. Section 1.9.10, *Cultural Resources Protection* discusses the protection of cultural resources as related to implementation of this INRMP.

2.1.6 Physical Environment and Climate

The recently completed planning level survey of Seagoville USARC (Parsons 2003) includes considerable site-specific information on this area, including the physical environment. This survey is in Appendix 2.1.6.

2.1.6.1 Physiography and Topography

Seagoville is within Dallas County in the northern part of the Texas Coastal Plain. Elevation (Figure 2.1.6.1) ranges from 385 to 420 feet above mean sea level (Detachment 1, Human Systems Center 1998a).

2.1.6.2 Soils

Soils on Seagoville USARC (Figure 2.1.6.2) were surveyed as part of the soil survey for Dallas County (Coffee *et al.* 1980).

Altoga Silty Clay is a deep, well drained, soil on escarpments of stream terraces. Rills and small gullies are common. Permeability is moderate, and the available water capacity is high. Runoff is medium. The erosion hazard is severe. It is suitable for pasture but not cultivation. It has low potential for urban development. It is found primarily in Training Area A.

Axtell Fine Sandy Loam is a deep, nearly level, moderately well drained soil on old high stream terraces. Permeability is very slow, and the available water capacity is high. Runoff is slow. The erosion hazard is slight. It is suitable for pasture and has low potential for crops. It has medium potential for urban development. A small section of this soil is found in the DEPMED site.

Burleson Clay is a deep, nearly level, moderately well drained soil on old high stream terraces. Permeability is very slow, and the available water capacity is high. Runoff is slow. The erosion hazard is slight. It is suitable for cropland and pasture. It has low potential for urban development. This soil is found in training areas E and H.

Crockett Fine Sandy Loam is a deep, nearly level, moderately well drained soil on uplands. Permeability is very slow, and the available water capacity is high. Runoff is slow. The erosion hazard is slight. It is suitable for cropland and is also used for pasture. It has medium potential for urban development. This soil is found in training areas C and G, the firing range, and in the cantonment. Another soil, classified as **Crockett** on Figure 2.1.6.2, is found in Training Area J and the adjacent storage area. This soil is not classified in the soil survey.

Gowen Loam is a deep, nearly level, well drained soil on flood plains. Permeability is moderate, and the available water capacity is high. Runoff is slow. The erosion hazard is slight. It is mostly used for pasture and has high potential as cropland. It has low potential for urban development. A narrow band of this soil is found along the boundary fence in Training Area D.

Mabank Fine Sandy Loam is a deep, nearly level, somewhat poorly drained soil in slight depressions on uplands. Permeability is very slow, and the available water capacity is high. Runoff is very slow. The erosion hazard is slight. It is mostly used for pasture and has medium potential as cropland. It has medium potential for urban development. This soil is found in the rifle range and in Training Area D.

Figure 2.1.6.1. Seagoville USARC Topography

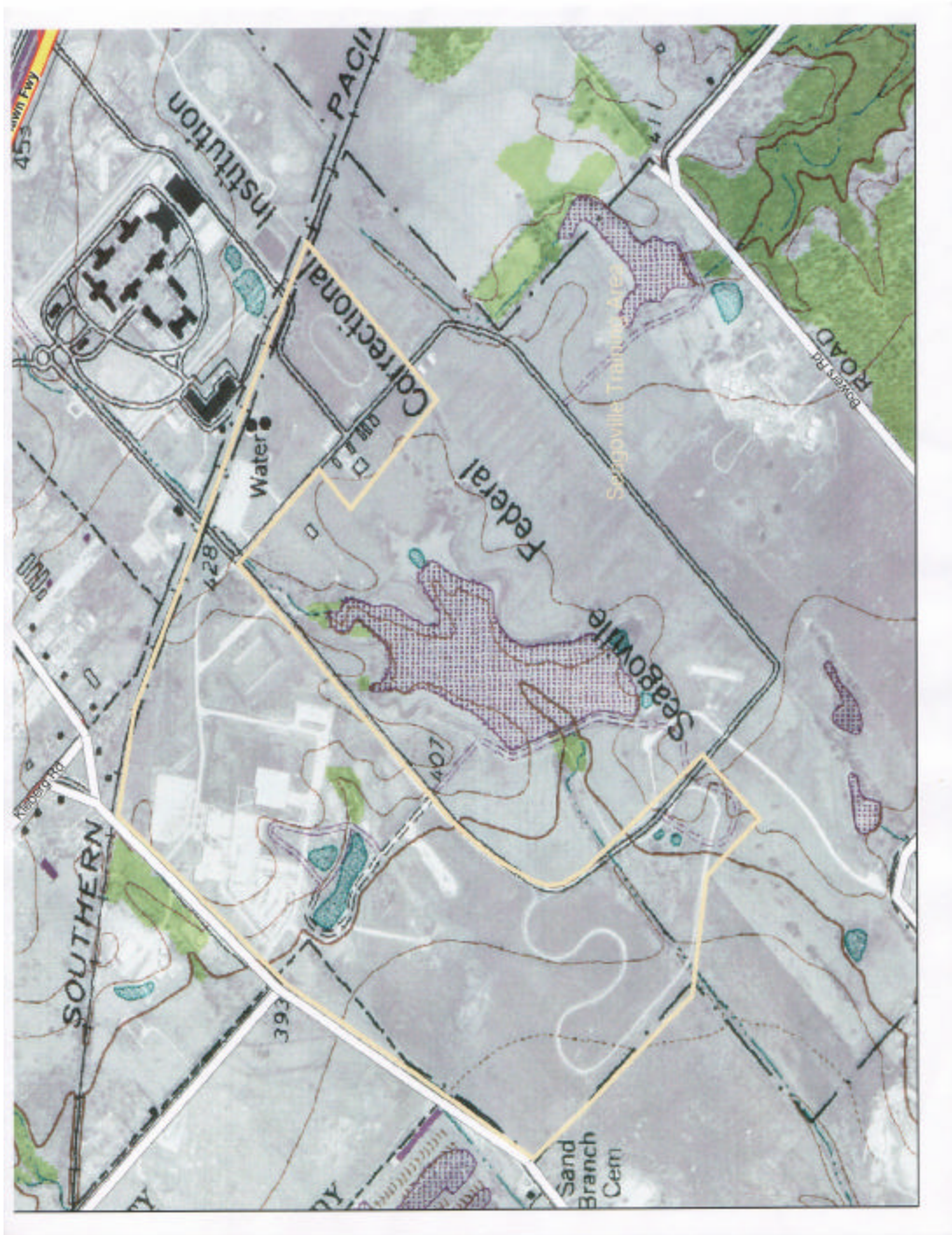


Figure 2.1.6.2. Seagoville USARC Soils



Rader-Mabank Complex is a deep, nearly level to gently sloping, moderately well drained soil on uplands. Permeability is very slow, and the available water capacity is high. Runoff is very slow. The erosion hazard is slight. It is mostly used for pasture and has medium potential as cropland. It has medium potential for urban development. This soil is found training areas F and G and the rifle range.

Silwata Fine Sandy Loam is a deep, gently sloping, well drained soil on uplands. Permeability is moderate, and the available water capacity is medium. Runoff is slow. Wind and water erosion hazards are moderate. It is mostly used for pasture and has medium potential as cropland. It has high potential for

urban development. This soil is found in the cantonment area, the recreation area with the lake, training areas C and D, and in the rifle range.

Wilson Clay Loam is a deep, nearly level, somewhat poorly drained soil on uplands. Permeability is very slow, and the available water capacity is high. Runoff is very slow. The erosion hazard is slight. It is mostly used for cropland and has a medium potential for pasture. It has low potential for urban development. This is the most common soil on Seagoville USARC and is found in training areas A, B, D, E, F, H, and J and in the DEPMED area.

The Land Condition Trend Analysis survey of Seagoville USARC (Detachment 1, Human Systems Center 1998b) found soil samples at the two survey sites in the northeastern portion of the LTA to be classified as clay loam with a texture of mainly heavy clay with about equal amounts of fine and coarse silt and predominantly very fine to fine sand composition.

2.1.6.3 Water Resources

There are no permanent surface waters on Seagoville USARC except for Joe Baker Lake, which is spring-fed. A small, intermittent stream passes through Training Area A (Figure 2.2.1b). There are no confirmed wetlands, but Training Area B has areas that may qualify for wetland classification, particularly just below Joe Baker Lake and along Simonds Road. There is no water quality information for these waters.

2.1.6.4 Climate

Table 2.1.6.4 summarizes weather information for the Seagoville, Texas area. Summers are hot, and winters are moderate. Rainfall occurs each month, peaking in the spring and early fall. Snowfall is infrequent. The prevailing wind is from the south. Winds are highest in April. Tornadoes and thunderstorms occur occasionally (Coffee *et al.* 1980).

Table 2.1.6.4: Seagoville, Texas Climate Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average High	55°F	59°F	68°F	76°F	83°F	91°F	96°F	96°F	88°F	78°F	67°F	57°F
Average Low	30°F	34°F	43°F	53°F	61°F	68°F	72°F	71°F	65°F	54°F	43°F	34°F
Mean	43°F	47°F	56°F	65°F	73°F	80°F	84°F	84°F	77°F	67°F	55°F	46°F
Record High	82°F (1970)	96°F (1996)	94°F (1974)	100°F (1963)	102°F (1985)	110°F (1980)	110°F (1974)	111°F (1984)	110°F (1985)	97°F (1983)	89°F (1989)	81°F (1977)
Record Low	3°F (1964)	7°F (1985)	14°F (1980)	29°F (1989)	42°F (1996)	53°F (1989)	55°F (1967)	52°F (1967)	42°F (1983)	26°F (1993)	16°F (1976)	-1°F (1989)
Average Precipitation	2.1 inches	2.9 inches	3.2 inches	3.8 inches	5.0 inches	3.1 inches	2.0 inches	1.8 inches	3.8 inches	3.7 inches	2.9 inches	2.4 inches

Source: www.weather.com

2.1.7 Biological Resources

The recently completed planning level survey of Seagoville USARC (Parsons 2003) includes considerable site-specific information on this area, specifically including biological resources. This survey is in Appendix 2.1.6.

2.1.7.1 Floral Resources

Floral Inventory

The Land Condition Trend Survey (Detachment 1, Human Systems Center 1998b) included identification of plant species found on two plots in the northeastern bivouac area of Seagoville USARC. This survey used standard Land Condition Trend Survey techniques (Tazik *et al.* 1992). Species identified during this

survey were Texas grama (*Bouteloua rigidiset*a), goosefoot (*Chenopodium* sp.), chicory (*Cichorium intybus*), crabgrass (*Digitaria ciliaris*), bermudagrass (*Cynodon dactylon*), Rattlesnake-weed (*Daucus pusillus*), barnyardgrass (*Echinochloa crus-pavonis*), hairy bedstraw (*Galium pilosum*), little barley (*Hordeum pusillum*), pea-vine (*Lathyrus pusillus*), pepperwort (*Lepidium oblongum*), bladder-pod (*Lesquerella auriculata*) yellow sweet clover (*Melilotus officianalis*), forked catchfly (*Siliene gallica*), Johnsongrass (*Sorghum halepense*), trepocarpus (*Trepocarpus aethusae*), clover (*Trifolium bejariense*), cow-herb (*Vaccaria pyramidata*), winter vetch (*Vicia dasycarpa*), and deer pea vetch (*Vicia ludoviviana*).

The recently completed planning level survey of Seagoville USARC (Parsons 2003) includes a list of 106 plant species found. This list is included in Appendix 2.1.6.

Vegetation Types

Seagoville USARC is located within the Blackland Prairies ecological area (Texas Parks and Wildlife Department 1984 in Detachment 1, Human Systems Center 1998a). This region of the Blackland Prairies was a once-luxuriant prairie dominated by tallgrasses, including little bluestem (*Schizachyrium scoparium* var. *frequens*), big bluestem (*Andropogon gerardii*), Indiangrass (*Sorghastrum nutans*), tall dropseed (*Sporobolus asper* var. *asper*), and Silveus dropseed (*Silveus silveanus*). Common forbs included asters (*Aster* sp.), prairie bluet (*Hedyotis nigricans* var. *nigricans*), prairie-clover (*Petalostemum* sp.) and late coneflower (*Rudbeckia serotina*). Common legumes included snoutbeans (*Rhynchosia* sp.) and vetch (*Vicia* sp.). Common invaders on poor condition rangelands and abandoned cropland included mesquite (*Prosopis glandulosa*), huisache (*Acacia smallii*), oak (*Quercus* sp.), and elm (*Ulmus* sp.). Oak, elm, cottonwood (*Populus deltoides*), and native pecan (*Carya* sp.) were common in riparian areas (Detachment 1, Human Systems Center 1998a).

Seagoville USARC has a long history of disturbance, agriculture use, and limited military activities. Little, if any, of the natural vegetation of the Blackland Prairies is evident on the LTA or surrounding areas. Historic use and ongoing periodic mowing as part of facility maintenance have perpetuated an introduced, weedy type of vegetation tolerant to light-moderate disturbance associated with training activities. Open areas are now vegetated with mainly introduced, low weedy species, including vetch, thistle (*Cirsium* sp.), Johnsongrass, bermudagrass, and asters. Oaks, elms, pecan, willows (*Salix* sp.), and cottonwood occur in small clumps, along fence-lines and drainages, and at Joe Baker Lake. General vegetation communities are show in Figure 2.1.7.1 (Detachment 1, Human Systems Center 1998a).

The recently completed planning level survey of Seagoville USARC (Parsons 2003 and Appendix 2.1.6) includes an update map of vegetation on the site.

2.1.7.2 Wetlands

The U.S. Congress enacted the Clean Water Act in 1972 to “*restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.*” Section 404 of the Clean Water Act delegates jurisdictional authority over wetlands to the Corps of Engineers and the Environmental Protection Agency. Waters of the United States protected by the Clean Water Act include rivers, streams, estuaries, and most ponds, lakes, and wetlands. The Corps of Engineers and the Environmental Protection Agency jointly define wetlands as .. “*areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.*”

Figure 2.1.7.1. Seagoville USARC Vegetation



The USFWS defines wetlands to include a variety of areas that fall into one of five categories:

- areas with hydrophytes and hydric soils, such as those commonly known as marshes, swamps, and bogs;
- areas without hydrophytes but with hydric soils, such as flats where drastic fluctuation in water levels, wave action, turbidity, or high concentration of salts may prevent the growth of hydrophytes;
- areas with hydrophytes but nonhydric soils, such as margins of impoundments or excavations where hydrophytes have become established but hydric soils have not yet developed;
- areas without soils but with hydrophytes, such as the seaweed-covered portion of rocky shores; and
- wetlands without soils and without hydrophytes, such as gravel beaches or rocky shores without vegetation.

Wetland functions and values include, but are not limited to the following: ground water recharge, ground water discharge, flood flow alteration, sediment stabilization, sediment or toxicant retention, nutrient removal or transformation, production export, wildlife diversity/abundance, aquatic diversity/abundance, uniqueness/heritage, and recreation. Executive Order 11990, *Protection of Wetlands* (1977) and the Clean Water Act (1977) require no net wetland losses on federal lands in the United States.

A specific survey for wetlands (both jurisdictional and non-jurisdictional) at Seagoville USARC (Parsons 2003 and Appendix 2.1.6) found eight non-jurisdictional wetland areas and one jurisdictional area (stream channel).

2.1.7.3 Faunal Resources

Seagoville USARC is located within the Texan Biotic Province (Blair 1950 in Detachment 1, Human Systems Center 1998a).

The Land Condition Trend Analysis (Detachment 1, Human Systems Center 1998b) included identification of animal species found on two plots in the northeastern bivouac area of Seagoville USARC during April 15-17, 1997. Bird species identified during this survey were the American Crow (*Corvus brachythynchos*), Killdeer (*Charadrius vociferous*), Scissor-tailed Flycatcher (*Tyrannus forficatus*), American Coot (*Fulica americana*), Blue-winged Teal (*Anas discors*), Great-tailed Grackle (*Quiscalus mexicanus*), Red-winged Blackbird (*Agelaius phoeniceus*), Northern Mockingbird (*Mimus polyglottos*), Grasshopper Sparrow (*Ammodramus savannarum*), Turkey Vulture (*Cathartes aura*), Great Egret (*Casmerodius albus*), and an unidentified Falcon and Hawk. The Eastern fox squirrel (*Sciurus niger*) was observed in the vicinity of the study area, and several unidentified turtles were observed at a pond on neighboring property.

During this INRMP site visit, white-tailed deer (*Odocoileus virginianus*) tracks were observed as were turtles on Joe Baker Lake. This lake also has bass, crappie, channel catfish, and various kinds of prey fish (Bennie Cox, Seagoville USARC, personal communication).

The recently completed planning level survey of Seagoville USARC (Parsons 2003 and Appendix 2.1.6) includes mammal, bird (45 species), and fish species found on the site, as well as species (including amphibians and reptiles) potentially found there.

2.1.7.4 Special Status Flora and Fauna

Virtually all ecologists would argue that every species extinction diminishes humanity.

Edward O. Wilson, Harvard University

Special status species are listed as threatened or endangered, are proposed for listing, or are candidates for listing by the state and/or federal government. No federal- or state-listed threatened or endangered species are known to occur in the immediate vicinity of Seagoville LTA, as determined by the USFWS and the TPWD (Detachment 1, Human Systems Center 1998b).

The recently completed planning level survey of Seagoville USARC (Parsons 2003 and Appendix 2.1.6) found no federal- or state-listed species on the site and concluded that none are likely to be found. This report includes lists of federal- and state-listed flora and fauna with a potential to occur in Dallas County. The USFWS noted⁷ that the endangered Golden-cheeked Warbler (*Dendroica chrysoparia*), threatened Piping Plover (*Charadrius melodus*), and the proposed threatened Mountain Plover (*Charadrius montanus*) should be added to the list, but none are likely to be found at Seagoville LTA.

2.1.8 Human Environment

2.1.8.1 Cultural Resources

Section 2.1.3, *Acreage, Acquisition, and History* discusses the general history of the areas that is now Seagoville USARC. Section 2.1.5, *Compatibility Issues (Cultural Resources)* discusses issues regarding compatibility between military activities at Seagoville USARC and cultural resources concerns.

As a result of the assessment and identification of a prehistoric lithic scatter, the archeological potential for Seagoville USARC was considered to be high. A Phase 1 survey of the 80 acres believed to retain integrity at Seagoville USARC, as part of the development of a draft Integrated Cultural Resources Management Plan (Parsons Engineering Science, Inc. 2002), resulted in the recovery of 109 artifacts (7 historic, 97 prehistoric, and 5 bivalve shells). No sites were determined to be eligible for listing in the National Historic Register of Historic Places.

2.1.8.2 Transportation and Utilities

Seagoville USARC is accessed primarily by U.S. Highway 175 from Dallas, which runs almost two miles northeast of the USARC. West Simonds Road connects the USARC to Highway 175. Downtown Dallas is about 17 miles to the northwest. Dallas-Fort Worth Airport and Love Field (in Dallas) are both less than a one-hour drive. Seagoville USARC obtains water and other utility services from the City of Seagoville.

2.1.8.3 Outdoor Recreation

Both fishing and picnicking occur at Joe Baker Lake. Fish populations are not managed.

2.2 Natural Resources Management

This chapter includes those programs that are implemented specifically for natural resources conservation at Seagoville USARC. Programs are described in terms of their status and recent history (**Current Management**) followed by proposed project(s) (**Proposed Management**), if appropriate. These projects

⁷ May 16, 2003 letter to 90th RSC (Appendix 1.7.6).

are intended to be Environmental Program Requirements submissions to integrate implementation of this INRMP to the budget process (see Section 3.4, *Implementation Funding Options*).

Projects are described in a goal(s)-objective(s) format to provide process descriptions that are compatible with adaptive management analyses and overall INRMP implementation monitoring processes. All goals and objectives are summarized in tabular format in Appendix 2.2.

Each project has a summary description at the beginning of the Proposed Management section. The format is as follows:

Project: Title

Justification: Laws, regulations, or policy compliance (*e.g.*, participation in regional initiatives; Sikes Act, Endangered Species Act, AR 200-3, stewardship)

Funding Priority: Proposed or actual budget classification

Project Timing: Dates to be accomplished, by objective (*e.g.*, 2003, 2003-05, indefinitely, uncertain)

Regulatory Coordination: Agencies with whom coordination is required

Some projects specific to Seagoville USARC are included in Section 1.9, *Management Common to 90th RSC Lands* to avoid redundancy.

2.2.1 General Fish and Wildlife Management

2.2.1.1 Current Management

Inventory and Monitoring

Section 2.1.7, *Biological Resources* discusses results of fauna and flora surveys performed on Seagoville USARC. A breeding season bird survey was conducted in May 2003 to meet USFWS recommendations⁸.

Management

Habitat management is accomplished through wetland management, erosion control, and focused wildlife habitat projects. The purpose of habitat management is to improve wildlife populations by managing resources (habitat) on which they depend. This means increasing access to food, cover, and/or water for desirable species while considering military training requirements. Wildlife and habitat management requires utilization of ecological functions and landscape level planning to adjust limiting factors and promote priority endemic species. Species management priorities have to be based on conservation needs as defined by global, regional, and local abundance; distribution and threats; population trends; importance of areas to species; potential for population and/or habitat management; and human interests.

Seagoville LTA has habitats that have developed following decades of disturbance. Improvements of these habitats for wildlife support both the natural resource management and military mission requirements. Wet areas (including any wetlands and Joe Baker Lake) are important wildlife habitat components, providing beauty, biodiversity, soil erosion control, homes for wildlife, etc. Grasslands provide protection for soils, provide wildlife habitat, contribute to an overall healthy environment, increase biodiversity, and provide variety for military training exercises. Active habitat management is not currently accomplished on the Seagoville LTA.

⁸ May 16, 2003 letter to 90th RSC (Appendix 1.7.6).

The recently completed planning level survey for Seagoville USARC (Parsons 2003 and Appendix 2.1.6) includes recommended plant species for the restoration of native prairie, wetland, and riparian areas. Appendix 2.2.1 is a list of native plants that the Texas Parks and Wildlife Department recommends for revegetation or landscaping purposes. In general, these species have both high erosion control capability and high value for different species of wildlife.

The recently completed planning level survey for Seagoville USARC (Parsons 2003 and Appendix 2.1.6) includes management recommendations for the area. The USFWS recommends⁹ that the following modifications to these recommendations:

- the selection of plant species for planting at various restoration sites should be based on soil types at those locations to enhance survival rates;
- mowing should be on a 3-year rotation with one-third of the fields mowed annually;
- using the USFWS Arlington Ecological Services Field Offices to assist with detailed planning for the restoration of old fields into tallgrass prairie;
- adjusting burn schedules to meet site-specific objectives; and
- investigating the possibility of developing a wetland inside the track and/or improving wetland H northeast of the track (specific recommendations provided for this option).

2.2.1.2 Proposed Management

Below objectives are included in other projects described in this INRMP, and they do not require funding beyond what is in these other projects. Thus, a specific project for general fish and wildlife management is not required. However, the below goal and objectives are appropriate to list.

Goal 1. Manage vegetation to support the military mission and maintain and enhance ecosystem integrity.

Objective 1. Perform a planning level survey of fauna and flora on Seagoville USARC, in conjunction with the survey of special status species (Section 1.9.2.2). Note: This has been completed.

Objective 2. Ensure that military activities do not significantly decrease the quality of wildlife habitat.

Objective 3. Use native plants for revegetation and landscaping that have both erosion control and wildlife values.

Objective 4. Review management recommendations within the recently completed planning level survey of Seagoville USARC (Parsons 2003) and implement those consistent with goals, objectives, and funding limitations of the 90th RSC; include USFWS recommendations for improvements to these management recommendations.

⁹ May 16, 2003 letter to 90th RSC (Appendix 1.7.6).

2.2.2 Soils Management

2.2.2.1 Current Management

Soils on Seagoville USARC have been inventoried (Coffee *et al.* 1980), and descriptions of soils that are on the LTA are discussed in Section 2.1.6.2, *Soils*. No general soil surveys are required for Seagoville USARC during the next five-year period.

Soils resource management to enhance and protect soils and water quality on Seagoville USARC is accomplished primarily by LTA existence (*i.e.*, protecting the areas from intensive natural resources use and/or urban development). Furthermore, military use of the LTA is subject to the general supervision and approval of the Facility Manager.

2.2.2.2 Proposed Management

Project: Soils Management

Justification: Maintaining the capability of training lands to support the military mission (Sikes Act), compliance with the Clean Water Act, stewardship

Funding Priority: Class 0

Project Timing: All objectives - indefinitely, as needed

Regulatory Coordination: None required

Goal 1. Use soil parameters to manage military activities, protect soil stability, rehabilitate training lands, and conserve wildlife habitat.

Objective 1. If needed, use soil conditions and inventory data to make decisions regarding land use and restoration options.

Goal 2. Monitor Seagoville USARC periodically for erosion and effects of erosion control.

Objective 2. Locate erosion sites for implementation of appropriate erosion control.

Goal 3. Ensure protection of soils within Seagoville USARC.

Objective 3. Ensure proper activity review, mission siting, scheduling and approval of military operations on Seagoville USARC to minimize potential soil damage or future erosion.

Objective 4. Inspect Seagoville USARC after military operations to identify and rectify soil disturbances in a timely manner.

2.2.3 Integrated Training Area Management

Integrated Training Area Management (ITAM) is an Army-wide program to provide quality training environments to support the Army's military mission and help ensure no net loss of training capability (a Sikes Act requirement). The ITAM program was initiated with the realization that Army training lands were being degraded to the point where their capabilities to sustain military missions were in jeopardy. Proper management to support both the military mission and other multiple-use activities is a challenge unique to Defense among managers of public lands.

The integration of stewardship principles into training land and conservation practices ensures that Army lands support training missions in a sustainable manner. Force readiness depends on the availability of high quality, realistic training lands. Several documents provide policy and procedural guidance for the ITAM program:

Army-wide Goal. The Army-wide goal for ITAM is to: “*achieve optimum, sustainable use of training lands by inventorying and monitoring land condition, integrating training requirements with land capacity, educating land users to minimize adverse impacts, and providing for land rehabilitation and maintenance*” (Department of the Army 1995b).

ITAM Program Strategy (Department of Army 1995b). The strategy describes the roles, responsibilities, and relationships among the functional proponent and supporting organizations, provides an overview of the ITAM policy and guidance, and describes the four ITAM components. The ITAM Program Strategy, along with input provided by Army conservation staff and Land Condition Trend Analysis outcomes, provided the foundation and guidance for the ITAM Regulation (AR 350-4) (Department of the Army 1998) and the Procedural Manual (Department of the Army 1999b).

AR 350-4 – ITAM (Department of the Army 1998). This regulation establishes policy for the Army’s ITAM program under proponent responsibility of the Deputy Chief of Staff for Operations and Plans. It defines Headquarters Department of the Army, Major Army Command, and Installation (*i.e.*, facility) responsibilities, management requirements, objectives, and general guidance to implement ITAM.

ITAM Procedural Manual (Department of Army 1999b). This document accompanies AR 350-4 (Department of the Army 1998) and defines Headquarters, Department of the Army, Major Army Command, and installation (*i.e.*, facility) roles, responsibilities, and Army-wide guidance to implement ITAM. Policies, procedures, and guidance in this manual are essential to achieve and maintain the Army ITAM program. Army mechanisms for program management, review, and information exchange include Program Management Reviews, quarterly newsletters (“*The Bridge*” published by the Army Environmental Center), the ITAM website, and the annual ITAM workshop.

Scope of ITAM. Installation Management Agency (Army Reserve) ITAM programs focus on training land management. ITAM funding is not intended to address or correct statutory compliance or conservation requirements, perform routine range maintenance or modification, or replace normal base operations activities on training lands normally funded by the Real Property Maintenance Account (Department of the Army 1999b).

The ITAM program includes the following four component areas (modified from *Integrated Training Area Management (ITAM) Program Strategy* (Department of the Army 1995b)).

- The Land Condition Trend Analysis component is used to inventory and monitor physical and biological resources to meet the multiple-use demands of facilities. It incorporates a GIS to support planning decision processes to effectively manage land use and natural resources.
- The Training Requirements Integration component integrates installation military training requirements for land use with natural resources conditions and capabilities to support these requirements.
- The Training Sustainment Awareness (formerly termed Environmental Awareness) component improves land user understanding of the impacts of their activities on the environment.

- The Land Rehabilitation and Maintenance component includes programming, planning, designing, and executing land rehabilitation and maintenance to support and sustain the military mission.

2.2.3.1 Current Management

Seagoville USARC is the only 90th RSC facility that requires significant ITAM support. A baseline Land Condition Trend Analysis has been conducted on two plots in the northeastern bivouac area on Seagoville LTA (Detachment 1, Human Systems Center 1998b). There is no obvious need to repeat this survey or to implement a more intensive Land Condition Trend Analysis survey at Seagoville LTA. The planning level fauna and flora survey (Parsons 2003 and Appendix 2.1.6), to include wetland determinations, will suffice to meet needs of Seagoville USARC during the next five years.

The integration of Seagoville USARC military training requirements for land use with natural resources conditions and capabilities is performed by the Facility Manager on a case-by-case basis. The Training Requirements Integration component of ITAM could be implemented on Seagoville USARC, especially since the Army is under requirements to do more with less. Army Reserve lands may be required to provide increased training use in the future, which Training Requirements Integration would support.

Training Sustainment Awareness is occurring at Seagoville USARC, primarily via the *Seagoville Local Training Area Standing Operating Procedures*¹⁰. Units must prepare a risk management worksheet prior to training, and before- and after-training inspections/inventories are conducted. This INRMP includes a project to develop a Trainer's Guide to natural resources for use by troops training on the property. The Trainer's Guide is discussed further in Section 2.2.4, *Conservation Awareness*. The Training Sustainment Awareness component of ITAM would provide a mechanism to improve land user understanding of impacts of their activities on Seagoville USARC.

Seagoville USARC would benefit from Land Rehabilitation and Maintenance programming, planning, design, and execution. The 90th RSC also uses leased lands near MG Harry Twaddle Armed Forces Reserve Center and U.S. Army Corps of Engineers lands at Barker Dam LTA for military activities. There is potential for damage to these lands.

2.2.3.2 Proposed Management

Project: Integrated Training Area Management

Justification: Maintaining the capability of training lands to support the military mission (Sikes Act), stewardship

Funding Priority: Not applicable since ITAM programs are not environmentally funded

Project Timing: Objectives 1 - 2003, objective 2 - as needed

Regulatory Coordination: None required

Goal. Provide quality training environments to support the U.S. Army Reserve military mission and help ensure no net loss of training capability.

Objective 1. Implement those components of the Integrated Training Area Management program that are needed to support military training at Seagoville LTA.

¹⁰ Prepared by Security, Plans, Operations and Training Section, 807th Medical Brigade (1 July 1996).

Objective 2. Periodically survey Seagoville LTA for training-related damage or potential improvements to training lands and develop and implement Land Rehabilitation and Maintenance projects, as required.

Objective 3. Periodically survey Barker Dam LTA for training-related damage or potential improvements to training lands and develop and implement Land Rehabilitation and Maintenance projects, as required¹¹.

Objective 4. Periodically survey leased lands near MG Harry Twaddle Armed Forces Reserve Center for training-related damage or potential improvements to training lands and develop and implement Land Rehabilitation and Maintenance projects, as required¹².

2.2.4 Conservation Awareness

2.2.4.1 Current Management

Conservation awareness is instrumental in creating conditions needed to manage natural resources. The 90th RSC approach to awareness stresses education, providing military personnel and, if needed, the general public with insights into Seagoville USARC conservation challenges. The more soldiers know about Seagoville USARC's natural resources, the more responsibly they act toward them. Both the public and the military need to know what actions are being taken to both enhance and protect natural resources on these public lands.

Education promotes awareness of critical environmental projects and the rationale behind them. Such activities as noxious weed management, erosion control, wildlife protection, etc. can be accomplished with little conservation awareness effort since soldiers and the general public naturally support these easily understood efforts. However, issues such as protection of sensitive areas for little understood plant and wildlife species, restrictions on troop field operations, etc. require effective conservation communication to get positive support and, perhaps more importantly, to avoid adverse reactions from various users. A conservation awareness program must be directed to both the external public interests and military personnel if it is to be effective. There is little media interest in operations occurring at Seagoville USARC.

2.2.4.2 Proposed Management

Project: Conservation Awareness

Justification: Stewardship

Funding Priority: Class 0

Project Timing: Objective 1 - ongoing indefinitely, objective 2- 2005

Regulatory Coordination: None required

Goal. Provide an understanding of Seagoville USARC natural resources programs to surrounding communities and users.

Objective 1. Use the 90th RSC Public Affairs Office for assistance and guidance with printed media.

¹¹ U.S. Army Corps of Engineer administered-land that is used by the 90th RSC for military training under a permit.

¹² Leased land near Midwest City, OK that is used by the 90th RSC for military training.

Objective 2. Develop a Trainer's Guide, in concert with the Seagoville USARC, with training land sustainment restrictions, as needed, for use by troops training on the LTA. Recommendations for the guide include: using tyvek (relatively waterproof and difficult to tear) paper and include information and restrictions regarding practices for general land management; plant and animal species management, including listed species information; rules for vehicle use and movement on the LTA; and hazardous substances and petroleum, oil, lubricant use and handling. A map showing wetlands and other limited-use areas should be included.

3.0 IMPLEMENTATION

This plan is only as good as the 90th Regional Support Command capability to implement it. This INRMP was prepared with a goal of 100% implementation. Below is described the organization, personnel, and funding needed to implement programs described in Chapter 2.

3.1 Organization

The 90th RSC's Environmental Division ultimately has the responsibility of implementing this plan, operating under a number of legal and political concerns, policies, and budgetary constraints. The Environmental Division at the 90th RSC can implement much of this INRMP and fulfill general goals and policies established in Chapter 1.

3.2 Personnel

*The management and conservation of natural and cultural resources under DoD control, including planning, implementation, and enforcement functions, are inherently governmental functions that shall not be contracted.*¹³

3.2.1 INRMP Implementation Staffing

3.2.1.1 Current Management

The 90th RSC Environmental Coordinator, Maurice L. Britt U.S. Army Reserve Center, North Little Rock, AR is available to implement this INRMP within the 90th RSC:

3.2.1.2 Proposed Management

Project: INRMP Implementation Staffing

Justification: Compliance with Sikes Act (implementation of INRMP) and other federal laws affected by this INRMP, support of the military mission, stewardship

Funding Class: Class 0

Project Timing: Objective - ongoing indefinitely

Regulatory Coordination: None directly

Goal. Provide staffing of natural resource management professionals required to effectively manage natural resources on 90th RSC lands (Department of Army 1995a).

Objective. Provide staffing for the 90th RSC natural resources program to effectively implement this INRMP.

¹³ DoD Instruction 4715.3, Environmental Conservation Program, 2 May 96.

3.2.2 Personnel Training

3.2.2.1 Current Management

The 90th RSC has a need to continuously improve the success of natural resources management activities through professional development and information exchange. Potential training opportunities include Installation Management Agency (Army Reserve) workshops, the annual National Military Fish and Wildlife Association meeting, the North American Wildlife and Natural Resources Conference, ITAM workshops, and DoD or Army workshops.

3.2.2.2 Proposed Action

Project: Personnel Training

Justification: Compliance with Sikes Act (implementation of INRMP) and other federal laws affected by this INRMP, support of the military mission, stewardship

Funding Priority: Class 0

Project Timing: All objectives - ongoing indefinitely

Regulatory Coordination: None directly

Goal. Provide for the training of natural resources personnel (Department of Army 1995a).

Objective 1. Maintain staff knowledge of management strategies at the current state of the art through training and participation in workshops and other activities of regional and national professional natural resources research and conservation programs.

Objective 2. Share information with natural resources experts to ensure maximum benefits of adaptive management and research efforts.

Objective 3. Review literature as a necessary commitment to maintain professional standards.

3.2.3 External Assistance

3.2.3.1 Current Management

The rapid development of natural resources management and many provisions within this INRMP, combined with Army personnel cutbacks, have resulted in the highest need ever for outside assistance with natural resources programs on 90th RSC lands. The growth of environmental compliance requirements has increased these needs and has added to the need for partners.

3.2.3.2 Proposed Action

There is no requirement for a specific project for external assistance since objectives within this area are included within other projects of this INRMP. However, the below goal and objectives are appropriate to list.

Goal. Provide external specialized skills and resources to support the 90th RSC natural resources program.

Objective 1. Implement external support projects described in appropriate sections of this INRMP.

Objective 2. Use contractors to assist with implementation of this INRMP.

Objective 3. Use state and federal agencies, particularly this INRMP's signatory partners, the USFWS and TPWD, and potentially other state wildlife agencies, to assist with implementation of various aspects of this INRMP.

3.3 Project/Program Summary

Projects, goals, and objectives within this INRMP can be used to monitor the effectiveness of natural resources management on 90th RSC lands. Appendix 3.3 contains a list of projects, goals, and objectives for this INRMP in the order they appear. Goals and objectives are abbreviated from chapters 1-3. The list does not include a priority system for two reasons.

- The Sikes Act requires implementation of this INRMP, making it difficult to identify priorities for implementation, which implies priorities for compliance. Federal agencies are required to fully comply with all federal laws.
- Many projects or programs affect obviously high priority species/communities/ecosystems/etc. (federal-listed species, wetlands, etc.) and at the same time affect species/communities/ecosystems/etc. that, prior to the passage of Sikes Act amendments, were not priorities (e.g., nonlisted species, noncritical habitat). It is often difficult to separate the benefactors of many programs.

3.4 Implementation Funding Options

Natural resources management within the Army relies on a variety of funding mechanisms, some of which are self-generating and all of which have different application rules. Below are general discussions about different sources of funding to implement this INRMP.

3.4.1 Agricultural Funds

Agricultural funds are derived from agricultural leases on installations (*i.e.*, facilities). They are centrally controlled at Department of Army and Major Command levels with no requirements for spending where they were generated. AR 200-3 (Chapter 2) (Department of the Army 1995a) outlines procedures for collection and spending these funds. They are primarily intended to offset costs of maintaining agricultural leases, but they are also available for preparing and implementing INRMPs. These are the broadest use funds available exclusively to natural resources managers.

The 90th RSC is authorized to request agricultural funds from the Installation Management Agency (Army Reserve). These would likely only be available to the 90th RSC if an agricultural lease were used to mow hay at Seagoville USARC; this may not be feasible.

3.4.2 Environmental Program Requirements

The Environmental Program Requirements (EPR) report provides the primary means for identifying current and projected environmental requirements and resources needed to execute the 90th RSC natural resources program. The EPR report satisfies Army reporting requirements, as specified in Executive Order 12088, Office of Management and Budget Circular A-11, and other federal directives. The report is used for many purposes: planning, programming, budgeting, and forecasting costs; documenting past accomplishments and expenditures; tracking project execution and monitoring performance; refining and validating requirements for the budget year; and supporting the Program Objective Memorandum for outyear requirements.

Environmental funds are a special subcategory of Operations and Maintenance funds. They are set aside by the Department of Defense for environmental purposes but are still subject to restrictions of Operations and Maintenance funds. Compliance with laws is the key to getting environmental funding. Environmental funds are most commonly used for projects that return the installation to compliance with federal or state laws, especially if noncompliance is accompanied by Notices of Violation or other enforcement agency actions.

“Must fund” classifications include mitigation identified within *Findings of No Significant Impact* and items required within Federal Facilities Compliance Agreements. This INRMP is a Federal Facilities Requirement Agreement, and some projects and programs within it are used to mitigate various military activities. In addition, 1997 amendments to the Sikes Act require implementation of INRMPs, which make implementation of this INRMP a priority for funding. Table 3.4.2 lists projects for which environmental funding is anticipated for implementation of this INRMP.

Table 3.4.2 Environmental Funds Projects*

Project	INRMP Section	EPR #	Fund Class ^a	FY 03	FY 04	FY 05	FY 06	FY 07	Totals
Integrated Natural Resources Management Planning/Implementation	1.9.1.2	90RSC INRMP	0	\$0	\$0	\$0	\$0	\$25	\$25
Federal- and State-listed Species Management	1.9.2.2	90RSC NRSUR	0	\$50**	\$0	\$0	\$0	\$0	\$50
Wetlands Management	1.9.4.2	SEAG WET	0	\$5	\$0	\$0	\$0	\$0	\$5
Revegetation	1.9.5.2	SEAG VEG	0	\$2	\$2	\$2	\$3	\$3	\$12
Data Storage, Retrieval, and Analysis	1.9.6.2	SEAG DATA	0	\$20	\$10	\$10	\$10	\$10	\$60
Pest Management Support	1.9.7.2	90RSC COORD	0	\$5	\$1	\$1	\$1	\$1	\$9
Use of NEPA	1.9.9.2	90RSC COORD	0	\$3	\$3	\$3	\$4	\$4	\$17
Cultural Resources Protection	1.9.10.2	FTCAS 99HQ1	0	Incidental to cultural resources funding.					
Soils Management	2.2.2.2	SEAG SOILS	0	\$2	\$2	\$2	\$3	\$3	\$12
Conservation Awareness	2.2.4.2	90RSC COORD	0	\$0	\$0	\$5	\$0	\$0	\$5
INRMP Implementation Staffing	3.2.2.1	90RSC COORD	0	\$25	\$26	\$27	\$28	\$29	\$135
Personnel Training	3.2.2.2	SEAG TRAIN	0	\$3	\$3	\$3	\$4	\$4	\$17
Totals				\$115	\$47	\$53	\$53	\$79	\$347

* Funding in thousands of dollars.

** Project also includes general species lists, wetlands delineation, and noxious weed identification. (Note: This project was completed with year-end 02 funding.)

a Class 0 - Recurring requirements necessary to manage and monitor environmental programs.

Class 1 (Must Fund) - Nonrecurring projects and activities at facilities that are out of compliance. Also includes projects and activities necessary to meet specified deadlines and requirements in the year funds are requested.

Class 2 (Must Fund) - Nonrecurring projects and activities at facilities in compliance at the present time but for which future specified deadlines and requirements are established.

Class 3 (Other Environmental) - Nonrecurring projects and activities that are not required by statute/regulation or do not have deadlines but that are needed to address overall environmental goals and objectives and to sustain environmental stewardship.

3.4.3 Operations and Maintenance Funds

Certain projects within this INRMP are either partially or fully funded with Operations and Maintenance Funds. General pest management, with exception of required noxious weed control at Seagoville USARC, is in this category. These funds are not included within this INRMP.

3.4.4 Training Funds

ITAM funding requests are not submitted via the EPR process. Instead, the Integrated Workplan Analysis Module (IWAM) is used to channel ITAM funding requests from Reserve Support Command to the Office of the Deputy Chief of Staff for Operations and Plans. This funding avenue will be developed as ITAM is evaluated for Seagoville USARC. It is anticipated that ITAM funding will be about \$5,000 annually during FY 03-05 and \$10,000 annually during FY 06-07.

3.5 INRMP Implementation Costs

Table 3.5 is a summary of likely funding avenues and dollars required for implementation of this INRMP.

Table 3.5 INRMP Implementation Costs*

Type Funds Anticipated	Section	FY 03	FY 04	FY 05	FY 06	FY 07	Totals
Environmental	3.4.2						
ITAM	3.4.4						
Totals							

* Funding in thousand of dollars

3.6 Command Support

Command support is essential to implementation of this INRMP. Many projects for natural resources management within the next five years require command support. This INRMP has the support of the 90th RSC Commander and other personnel in command positions who are needed to implement this INRMP. The Command is dedicated to implementation of this INRMP, as required by the Sikes Act and other federal laws. Just as importantly, the Command is dedicated to maintaining and improving the military mission at 90th RSC lands. Implementation of this INRMP is a means to that end.

4.0 ENVIRONMENTAL CONSEQUENCES

This section of the document assesses known, potential, and reasonably foreseeable environmental consequences related to implementing the INRMP and managing natural resources at 90th RSC lands. The following sections address potential effects of implementation of the No Action Alternative (Current Management) and the Preferred Alternative (Proposed Management). Each alternative is discussed with regard to impacts to baseline resources defined in Chapter 2 in the *Affected Environment* section. Cumulative effects are discussed in Section 4.3, *Cumulative Impacts*. A summary of potential environmental consequences associated with the No Action Alternative and the Preferred Alternative is presented in Section 4.4, *Summary of Potential Environmental Consequences*.

Other management alternatives were considered during the screening process but eliminated because they were economically infeasible, ecologically unsound, or incompatible with requirements of the military mission.

Impacts Common to Both Alternatives

No discernable adverse effects were identified or anticipated (Section 1.7.5, *Issues Not Addressed or Considered to be Potentially Significant*) for the No Action Alternative or the Preferred Alternative for the following resource areas and issues: Physiography, Topography, Geology, Petroleum and Mineral Resources, Climate, Noise Environment, Hazardous and Toxic Materials, Socioeconomics, Environmental Justice, and Environmental Health and Safety Risks for Children.

The 90th RSC INRMP is a living document that focuses on a 5-year planning period based on past and present actions. Short-term management practices included in the plan have been developed without compromising long-range goals and objectives. Because the plan will be reviewed annually and undergo a major update every five years, additional environmental analyses may be required as new management measures are developed at any time.

4.1 No Action Alternative

Adoption of the No Action Alternative would mean that this 90th RSC INRMP would not be implemented, and current natural resource management practices at 90th RSC lands would continue “as is.” As shown, no significant or adverse effects would be expected. However, under the No Action Alternative, environmental conditions at the USARC would not benefit from management measures associated with implementing the proposed INRMP. Expected consequences of affected resource areas for the No Action Alternative are presented in the following paragraphs.

Soils. Slightly beneficial effects would be expected to continue under the No Action Alternative. The No Action Alternative implements minimal soil resource protection measures. Implementation of the No Action Alternative involves reactive management of problems, rather than managing the resource to prevent impacts or to minimize the extent of unavoidable impacts.

Water Resources. Slightly beneficial effects would be expected to continue under the No Action Alternative, particularly at Seagoville USARC. The Seagoville USARC has a minimal soil protection program, but considering the types of military activities on the area, risks of sedimentation to area waterways is minimal. The lack of an ITAM program under the No Action Alternative reduces planning and land repair capabilities.

Flora

General. The No Action Alternative has no effect on floral resources in general since vegetation is not actively managed at 90th RSC lands, including Seagoville USARC. Additional surveys of floral resources would likely not occur.

Special Status Flora. No special status flora are known to occur on 90th RSC lands. Under the No Action Alternative further surveys for special status species would not occur at Seagoville USARC. Thus, the No Action Alternative would have no effect. However, if a federal-listed species were documented on 90th RSC lands, management of such species would be identical under both alternatives due to legally mandated requirements associated with the Endangered Species Act.

Wetlands. The No Action Alternative does not recognize potential wetlands 90th RSC lands, including Seagoville USARC. A survey of potential wetlands and possible delineations would not occur. If lands that appear to have wetland characteristics are wetlands, there is the possibility that wetlands would be damaged by the No Action Alternative.

Fauna

General. The No Action Alternative has no effect on faunal resources. Fauna species and habitat would not be actively managed under this alternative. General fauna surveys would not occur.

Special Status Fauna. No special status fauna are known to occur on 90th RSC lands. Under the No Action Alternative a survey for special status species would not occur at Seagoville USARC. Thus, the No Action Alternative would have no effect. However, if a federal-listed species were documented on 90th RSC lands, management of such species would be identical under both alternatives due to legally mandated requirements associated with the Endangered Species Act.

Cultural Resources. No sites on 90th RSC lands that have natural resources programs were determined to be eligible for listing in the National Historic Register of Historic Places; thus risks to significant cultural resources are minimal. Under the No Action Alternative, there is no formal plan for consultation and coordination with the environmental protection specialist prior to the initiation of a natural resource management activity that might have the potential to impact historic or cultural resources. The purpose of the consultation is to determine whether cultural resources are in close proximity to the proposed activity and whether the activity would have the potential to adversely affect those resources. Under the No Action Alternative, there is no reduction in the probability that potential cultural resource sites will be disturbed.

Summary. While the analysis of existing (*i.e.*, baseline) conditions identifies no serious environmental concerns, current natural resources practices provide minimal benefit for conservation, management, and restoration of the 90th RSC's natural resources. This condition conflicts with the 90th RSC's requirement to train soldiers in a realistic natural setting while simultaneously meeting mission requirements and complying with environmental regulations and policies. In addition, not implementing management measures inhibits the 90th RSC's ability to adequately engage in future planning initiatives and does not capture benefits derived from identifying and executing comprehensive, integrated environmental and natural resource management actions. Without comprehensive planning, there is the potential that adverse

effects on natural resources might occur over the long-term. Therefore, implementation of the No Action Alternative is not favored.

4.2 Preferred Alternative

Potential environmental consequences associated with implementing the INRMP would result in either no effects or beneficial effects for the resource areas. Compared to the No Action Alternative, environmental conditions at 90th RSC lands, particularly Seagoville USARC, would improve as a result of implementing the proposed INRMP. Expected consequences of affected resource areas for the Preferred Alternative are presented in the following paragraphs.

Soils. Beneficial effects would be expected. The Preferred Alternative includes an integrated program for planning land use, evaluation of land use effects, and maintenance and repair of damaged lands. Brief periods of increased erosion may occur during damaged sites' maintenance and rehabilitation activities, but these would be more than compensated through increased environmental awareness while training; repair and maintenance of the training area; training guidelines for vehicle movement and digging operations; and including natural resources implications in military project planning. The Preferred Alternative offers more effective protection and mitigation for damages incurred to soils due to the military mission than does the No Action Alternative.

Water Resources. Beneficial effects would be expected. The Preferred Alternative includes a project to determine if wetlands are present on Seagoville USARC, which, if confirmed, would provide a means to protect them and their functionality. The Preferred Alternative includes an integrated program for planning land use, evaluating land use effects, and the management and repair of damaged lands. The Preferred Alternative describes projects to evaluate and reduce the potential of erosion by maintaining training lands. Brief periods of increased sedimentation may occur during repair and construction activities, but these should be more than compensated for by the reduction in sedimentation to wetlands resulting from including natural resources implications in military project planning. The Preferred Alternative offers more effective protection and mitigation for damages incurred to potential wetlands and area water resources due to the military mission than does the No Action Alternative.

Flora

General. Beneficial effects would be expected. The Preferred Alternative would provide management of floral resources at 90th RSC lands, particularly at Seagoville USARC. The INRMP uses an ecosystem management strategy to achieve biological diversity conservation, in accordance with the Department of Defense Biodiversity Initiative (The Keystone Center 1996). It emphasizes the use of native species, as emphasized on the Presidential memorandum to the heads of federal agencies (Office of the President 1994).

The Preferred Alternative includes specific actions to manage ecosystems, including a flora survey, identification of potential sensitive ecological areas, and an integrated approach to pest management. These programs include minimizing damage to wildlife habitat by soldiers and other users and wetland protection (if they are confirmed). Implementation of NEPA under this alternative provides a methodology to help ensure compliance with laws and regulations affecting biological resources on 90th RSC lands.

Special Status Flora. There are no known federal- or state-listed flora on 90th RSC lands. However, the Preferred Alternative includes a planning level survey for Seagoville USARC that includes threatened and endangered species. If federal-listed species were identified at Seagoville USARC or elsewhere on 90th RSC lands, management would be identical under both alternatives due to legally mandated requirements associated with the Endangered Species Act.

Wetlands. Implementation of the Preferred Alternative would provide protection measures for wetlands by preventing or minimizing potential impacts that result from training and other mission-related activities.

Fauna

General. Beneficial effects would be expected. Implementation of the Preferred Alternative would improve habitat conditions, which would be beneficial to wildlife populations. A fauna survey would be conducted on Seagoville USARC.

Special Status Fauna. There are no known federal- or state-listed fauna on 90th RSC lands. Implementation of the Preferred Alternative would provide a greater degree of protection and management for species not protected under the Endangered Species Act. Federal-listed species management would be implemented if federal-listed species were discovered during surveys.

Cultural Resources. No sites at Seagoville USARC were determined to be eligible for listing in the National Register of Historic Places; thus risks to significant cultural resources are minimal since this is the only site where active soils management is proposed. The INRMP includes steps to protect cultural resources sites from damage during implementation of this plan. Review of projects by the Environmental Coordinator and the NEPA process are used to ensure protection of potential cultural resources while implementing the INRMP.

Summary. These findings are consistent with goals of the natural resources management program to maintain ecosystem functionality and ensure the sustainability of desired military training area conditions. The nature of management measures recommended by the INRMP, if implemented, would directly and positively affect the health and condition of natural resources at 90th RSC lands.

4.3 Cumulative Impacts

A cumulative effect is defined as an effect on the environment that results from the incremental effect of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions. Cumulative effects can result from individually minor, but collectively significant, actions taking place locally or regionally over a period of time.

Implementation of the No Action Alternative would result in little active management on 90th RSC lands. Compliance with laws and policies and minimal implementation of programs would continue, but implementation of a strategic comprehensive program for management of natural resources would not exist. INRMP implementation would be beneficial and improve environmental conditions at 90th RSC lands in some resource areas. Over time, adoption of the No Action Alternative would hinder 90th RSC's capability to achieve its goal of maintaining ecosystem viability and ensuring sustainability of desired military training area conditions.

Implementation of the INRMP would result in a comprehensive environmental strategy for the 90th RSC that improves the management approach for natural resources on the RSC lands and meets legal and policy requirements consistent with national natural resources management philosophies. Implementation would improve existing environmental conditions on 90th RSC lands, particularly at Seagoville USARC, as shown by the potential for beneficial effects in Table 4.4. Over time, adoption of the Preferred Alternative would enable the 90th RSC to achieve its goal of maintaining ecosystem viability and ensuring sustainability of desired military training area conditions.

There are no known changes planned for the 90th RSC military mission or to the intensity and extent of training that presently occurs on the these lands. Although growth and development can be expected to continue around 90th RSC lands, their environmental effects, although possibly somewhat adversely affecting natural resources within the ecoregion, would not be expected to result in cumulatively adverse effects to these resources when added to the effects of activities associated with proposed management measures contained in the INRMP.

4.4 Summary of Potential Environmental Consequences

Table 4.4 Summary of Potential Environmental Consequences

Resource Area*	Environmental Consequence**	
	No Action Alternative	Preferred Alternative
Physiography/Topography	No Effect	No Effect
Geology	No Effect	No Effect
Petroleum and Minerals	No Effect	No Effect
Soils	Slightly Beneficial	Beneficial
Water Resources	Slightly Beneficial	Beneficial
Noise Environment	No Effect	No Effect
Climate	No Effect	No Effect
Flora (General)	No Effect	Beneficial
Special Status Flora	No Effect	Potentially Beneficial
Wetlands	Potentially Adverse	Potentially Beneficial
Fauna (General)	No Effect	Beneficial
Special Status Fauna	No Effect	Potentially Beneficial
Cultural Resources	No Effect	Potentially Beneficial
Land Use, Facilities, and Utilities	No Effect	No Effect
Socioeconomic Environment	No Effect	No Effect
Environmental Justice	No Effect	No Effect
Protection of Children	No Effect	No Effect
Cumulative Impacts	Less Beneficial	Beneficial

* Resource areas presented in this column are the same resource areas presented in Chapter 2, *Affected Environment*, and include potential issues that were eliminated during scoping (See Section 1.7.4.3). Cumulative Impacts (see Section 4.3) have been added to this table.

**No Effect: Actions have no known demonstrated impacts.

Beneficial: Actions have apparent beneficial effects.

Adverse: Actions have apparent adverse effects.

(Notes: The terms “less” or “more” may be added to the terms “beneficial” or “negative” for comparison purposes between alternatives. Potential consequences would occur if these resources were confirmed on the area.)

5.0 CONCLUSIONS

5.1 INRMP Summary

This document reflects the commitment set forth by the 90th RSC to conserve, protect, and enhance the natural resources necessary to provide realistic military training for Reserve units. The primary purpose and objective of this document is to present an implementable INRMP that guides the 90th RSC in meeting mission requirements, achieving natural resource management goals, and complying with environmental policies and regulations. In addition, the NEPA analysis required for undertaking this major federal action (*i.e.*, implementation of this plan) is embodied within the INRMP. The resultant “planning assessment” includes a comprehensive description, evaluation, and assessment of environmental conditions and natural resources at Seagoville USARC.

This INRMP is the final plan that will direct the natural resources management program on 90th RSC lands in general and at Seagoville USARC in particular from 2003 through 2007. An ecosystem approach was used to develop management projects for each resource area. Implementation of management projects will maintain, protect, and enhance the ecological integrity of training lands and biological communities inhabiting them. In addition, natural resources management measures described in this plan will protect 90th RSC ecosystems and their components from unacceptable damage or degradation and identify and restore previously degraded habitats.

5.2 NEPA Findings and Conclusions

The proposed action to implement the INRMP by the 90th RSC was analyzed by comparing potential environmental consequences against existing conditions. Findings indicate that, under the Preferred Alternative, potential consequences would result in either no significant adverse effects or beneficial effects on each resource area (see Section 4.4, *Summary of Potential Environmental Consequences*). The affected environment would not be significantly or adversely impacted by proceeding with the Preferred Alternative. Additionally, no significant cumulative effects would be expected.

Based on this environmental assessment, implementation of the Preferred Alternative (full implementation of this INRMP) would have no significant adverse environmental or socioeconomic effects. Because no significant effects would result from implementation of the Preferred Alternative, preparation of an environmental impact statement is not required, and preparation of a Finding of No Significant Impact is appropriate.

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ACRONYMS

AR	Army Regulation
DEPMED	Deployable Medical Equipment
DoD	Department of Defense
EA	Environmental Assessment
EPR	Environmental Program Requirements
F	Fahrenheit
FNSI	Finding of No Significant Impact
INRMP	Integrated Natural Resources Management Plan
ITAM	Integrated Training Area Management
LTA	Local Training Area
NEPA	National Environmental Protection Act
NRHP	National Register of Historic Places
RSC	Regional Support Command
SHPO	State Historic Preservation Office
TPWD	Texas Parks and Wildlife Department
USAR	United States Army Reserve
USC	United States Code
USFWS	United States Fish and Wildlife Service